STIC Search Report

Biotech-Chem Library

STIC Database Tracking Number: 94499

TO: Jon Epperson
Location:
Art Unit: 1639
June 9, 2003

Case Serial Number: 743746

From: P. Sheppard
Location: CM1-1E03
Phone: (703) 308-4499

sheppard@uspto.gov

Search Notes

Access DB# 94499

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SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: (S~~tic~~) Jon Epperson Examiner #: 74431 Date: 5/20/03

Art Unit: 1639 Phone Number 30 8-4123 Serial Number: 09/743,748

Mail Box and Bldg/Room Location: CM1-3301 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

****

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: Arylsulfone linkers for mass spectrometric analysis

Inventors (please provide full names): Gunter Schmidt et al

Earliest Priority Filing Date: 7/13/1999

**For Sequence Searches Only* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.*

1) Please do a "structure search" on the compounds listed in claims 35-39 (see attached sheet)

Thanks for your help!

-Jon

****

STAFF USE ONLY	Type of Search	Vendors and cost where applicable
Searcher: Sherry Paine	NA Sequence (#)	STN
Searcher Phone #:	AA Sequence (#)	Dialog
Searcher Location:	Structure (#)	Questel/Orbit
Date Searcher Picked Up:	Bibliographic	Dr.Link
Date Completed: 6/9/03	Litigation	Lexis/Nexis
Searcher Prep & Review Time:	Fulltext	Sequence Systems
Clerical Prep Time:	Patent Family	WWW/Internet
Online Time:	Other	Other (specify)

PTO-1590 (8-01)

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=> fil hcaplus
FILE 'HCAPLUS' ENTERED AT 15:19:33 ON 09 JUN 2003
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FILE COVERS 1907 - 9 Jun 2003  VOL 138 ISS 24
FILE LAST UPDATED: 8 Jun 2003  (20030608/ED)

 This file contains CAS Registry Numbers for easy and accurate
 substance identification.

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L3                STR
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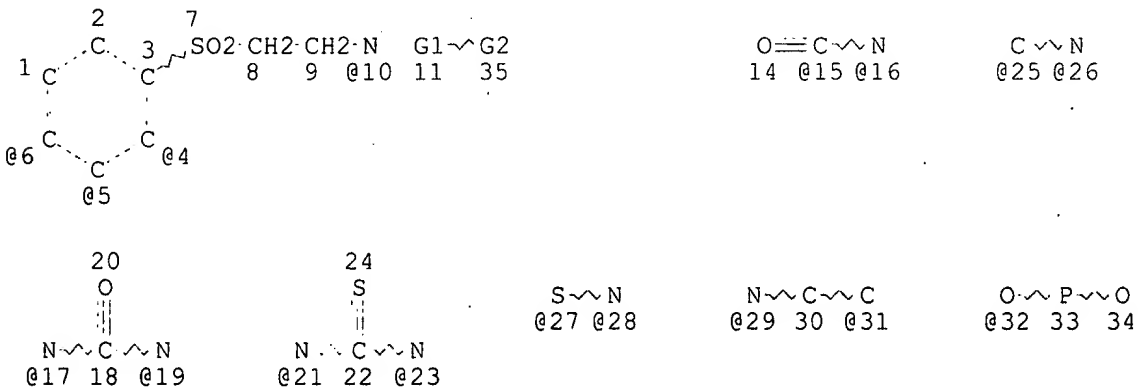


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DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
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NUMBER OF NODES IS  33

STEREO ATTRIBUTES: NONE
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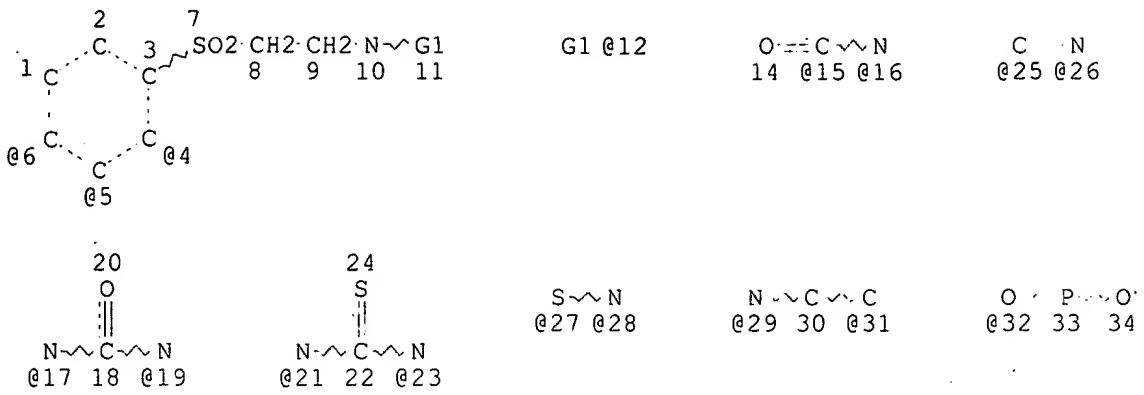

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NUMBER OF NODES IS 33

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L9            1 SEA FILE=REGISTRY ABB=ON  PLU=ON  OLIGOETHER/BI
L10         168 SEA FILE=REGISTRY ABB=ON  PLU=ON  POLYETHER/BI OR POLYETHERS/BI

L11     1273885 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L9 OR L10 OR ?ETHER?
L12          12 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L11 AND L8
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=> d ibib abs hitrn l12 1-12

L12 ANSWER 1 OF 12 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2003:1186 HCAPLUS
DOCUMENT NUMBER: 138:57470
TITLE: Manufacture of azo compounds for black-dyeing inks
INVENTOR(S): Lehmann, Urs; Tzikas, Althanassios; Frick, Marcel
PATENT ASSIGNEE(S): Ciba Specialty Chemicals Corporation, USA
SOURCE: U.S., 37 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6500247	B1	20021231	US 2000-495803	20000201
US 2003024435	A1	20030206	US 2002-60833	20020129

PRIORITY APPLN. INFO.: EP 1999-810098 A 19990205
US 2000-495803 A3 20000201
OTHER SOURCE(S): MARPAT 138:57470
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Black-dyeing aq. inks having good black shades without a shade change in artificial light and outstanding lightfastness comprise 20-95% of at least one dye (A), **together** with 5-80% of at least one dye chosen from the group consisting of (B) and (C), and 1-40% of a water-miscible org. solvent, based on the total wt. of the ink, where the dye (A) contains, as the coloring part of the mol., one or more radicals of the formula I, II, III or IV, the dye (B) contains, as the coloring part of the mol., one or more mono- or disazo radicals contg. sulfo groups or one or more radicals of the formula V, VI, or VII and the dye (C) contains, as the coloring part of the mol., one or more mono- or disazo radicals contg. sulfo groups or one or more radicals of the formulas V, VI, or VII and one or more radicals of the formulas I, II, III or IV (G = amino, OH, nitro groups; L = H or amino groups; R = halogen, C1-4 alkyl, alkoxy, C2-4 alkoxyamino, OH, COOH, nitro, CN; V = halogen, C1-4 alkyl, alkoxy, .beta.-sulfoethylsulfonyl, sulfo groups; W = N-acyl radical; n = 0, 1-3; m = 1-3; r, q = 0, 1).

IT **479548-95-3P**
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(dye compds.; manuf. of azo compds. for black-dyeing inks)

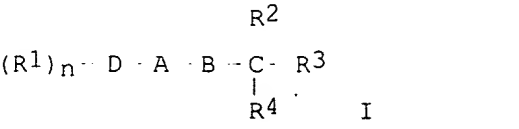
REFERENCE COUNT: 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 2 OF 12 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1999:783925 HCAPLUS
DOCUMENT NUMBER: 132:22753
TITLE: Preparation of N-(arylsulfonylphenyl)-2-hydroxy-2-methyl-3,3,3-trifluoropropanamide derivatives for the elevation of pyruvate dehydrogenase (PDH) activity
INVENTOR(S): Butlin, Roger John; Nowak, Thorsten; Burrows, Jeremy Nicholas; Block, Michael Howard
PATENT ASSIGNEE(S): Zeneca Limited, UK
SOURCE: PCT Int. Appl., 211 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9962506	A1	19991209	WO 1999-GB1669	19990526
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2331685	AA	19991209	CA 1999-2331685	19990526
AU 9940524	A1	19991220	AU 1999-40524	19990526
AU 740909	B2	20011115		
BR 9910821	A	20010213	BR 1999-10821	19990526
EP 1082110	A1	20010314	EP 1999-923767	19990526
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
EE 200000691	A	20020415	EE 2000-691	19990526

JP 2002516854	T2	20020611	JP 2000-551762		19990526
NZ 507784	A	20021025	NZ 1999-507784		19990526
US 6498275	B1	20021224	US 2000-700370		20001115
NO 2000006010	A	20010126	NO 2000-6010		20001128
PRIORITY APPLN. INFO.:			GB 1998-11427	A	19980529
			WO 1999-GB1669	W	19990526

OTHER SOURCE(S): MARPAT 132:22753
GI



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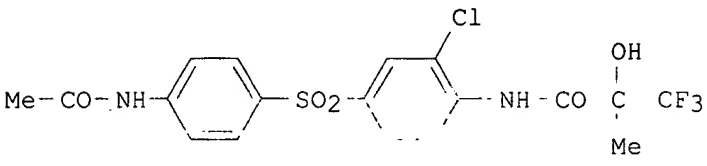

II

AB Aryl Ph sulfone and sulfoxide derivs. (I) [where ring D = (un)substituted Ph, pyridyl, pyrazinyl, pyrimidinyl, pyridazinyl, or other 6-membered N-contg. heteroaryl ring; R1 = (hetero)arylsulfonyl, (hetero)arylsulfinyl, (hetero)arylcarbonyl, (halo)alkyl, (halo)alkoxy, alkenyloxy, cyano, NO2, halo, S-CF3, OH, or a variety of (un)substituted functional groups; n = 1 or 2; R2 and R3 = independently (halo)alkyl or 3-5 membered (halo)cycloalkyl ring; A-B = NH-C(O), O-CH2, S-CH2, (trans)-vinylene, ethynylene, NH-C(S), or C(O)-CH2; R4 = H, OH, halo, NH2, or Me], and pharmaceutically acceptable salts or in vivo hydrolysable esters thereof, were prepd. Pharmaceutical compns., methods, and processes for prepn. of compds. of formula I are also described. For example, (R)-(+)-2-hydroxy-2-methyl-3,3,3-trifluoropropanoic acid (prepn. given) was mixed with oxalyl chloride and added to 4-(4-acetamidophenylsulfonyl)-2-chloroaniline (prepn. given) in DCM to yield (R)-N-[4-(4-acetamidophenylsulfonyl)-2-chlorophenyl]-2-hydroxy-2-methyl-3,3,3-trifluoropropanamide (R)-(II). Title compds. elevate pyruvate dehydrogenase (PDH) activity (no data) and are useful in the treatment of diabetes mellitus, peripheral vascular disease, cardiac failure and certain cardiac myopathies, myocardial ischemia, cerebral ischemia and perfusion, muscle weakness, hyperlipidemias, Alzheimer's disease, and/or atherosclerosis.

IT **252017-99-5P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(target compd.; prepn. of N-(arylsulfonylphenyl)-2-hydroxy-2-methyl-3,3,3-trifluoropropanamide derivs. for elevation of pyruvate dehydrogenase (PDH) activity)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 3 OF 12 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1999:10283 HCAPLUS
DOCUMENT NUMBER: 130:168225
TITLE: Generation and Trapping of N-Acyliminium Ions Derived from Isomuenchnone Cycloadducts. A Versatile Route to Functionalized Heterocycles

AUTHOR(S): Brodney, Michael A.; Padwa, Albert
CORPORATE SOURCE: Department of Chemistry, Emory University, Atlanta, GA, 30322, USA
SOURCE: Journal of Organic Chemistry (1999), 64(2), 556-565
CODEN: JOCEAH; ISSN: 0022-3263
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 130:168225

AB A series of 2-diazo-N-hept-6-enoylmalonamides were prepd. and treated with a catalytic amt. of rhodium(II) perfluorobutyrate. The resultant carbenoids underwent facile cyclization onto the neighboring amide carbonyl oxygen atom to generate isomuenchnone-type intermediates. Subsequent 1,3-dipolar cycloaddn. across the pendant olefin afforded intramol. cycloadducts in high yield. The cascade sequence is simple, direct, and extremely tolerant of structural diversity. Exposure of these cycloadducts to Lewis acids resulted in oxabicyclic ring opening. N-Acyliminium ions of wide structural variety can be easily generated by this sequence of reactions. Different cyclization pathways become available depending on the nature of the substituent group attached to the amide nitrogen. When the **tethered** group is electrophilic in nature, proton loss from the initially formed N-acyliminium ion occurs rapidly to give an acyl enamide which undergoes a subsequent cyclization at the electrophilic center.

IT **220445-77-2P 220445-83-0P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(generation and trapping of N-acyliminium ions derived from isomuenchnone cycloadducts)

REFERENCE COUNT: 91 THERE ARE 91 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 4 OF 12 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1996:340182 HCAPLUS
DOCUMENT NUMBER: 125:12775
TITLE: Acidic phosphonic acid derivative based internal releasing agents for moldings
INVENTOR(S): Horihata, Tomoko; Okazaki, Mitsuki; Kanemura, Yoshinobu; Nagata, Teruyuki; Nakashio, Fumyuki; Shinkai, Seiji; Goto, Masahiro
PATENT ASSIGNEE(S): Mitsui Toatsu Chemicals, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 38 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08057864	A2	19960305	JP 1994-200833	19940825
JP 3308113	B2	20020729		

PRIORITY APPLN. INFO.: JP 1994-200833 19940825
OTHER SOURCE(S): MARPAT 125:12775

AB The title agents are useful as internal releasing agents for plastics (e.g., polyurethanes).

IT **152993-40-3**
RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
(acidic phosphonic acid deriv. based internal releasing agents for moldings)

L12 ANSWER 5 OF 12 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1996:81507 HCAPLUS
DOCUMENT NUMBER: 124:120110
TITLE: Reactive dye-containing printing inks, their preparation and their use
INVENTOR(S): Eltz, Andreas; Russ, Werner Hubert
PATENT ASSIGNEE(S): Hoechst A.-G., Germany
SOURCE: Ger. Offen., 10 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 4417718	A1	19951123	DE 1994-4417718	19940520
EP 684292	A1	19951129	EP 1995-106358	19950427
EP 684292	B1	19981118		
R: CH, DE, FR, GB, IT, LI, NL				
JP 08048897	A2	19960220	JP 1995-119780	19950518
US 5542972	A	19960806	US 1995-444016	19950518

PRIORITY APPLN. INFO.: DE 1994-4417718 19940520
OTHER SOURCE(S): MARPAT 124:120110
AB Water-thinned jet printing inks contain .gtoreq.1 reactive dyes Z(G-E-ANMCH)n (A is optionally halogenated alkylene; E is SO2 or CO; G is a direct bond or imino group; G, E, and A **together** may form nitrogen heterocycles contg. 1 or 2 NMCN groups; M is H, alkali metal, alk. earth metal, or ammonium; n is 1-4; Z is an azo or other dye chromophore) in addn. to alk. or basic agents. The inks have dyes with improved storage stability. Thus, C.I. Reactive Black 5 was treated with cyanamide to give a bis(cyanamidoethylsulfonyl) reactive dye which was incorporated into an ink compn. also contg. triethanolamine as a basic agent. The compn. was storage stable and noncorrosive.
IT **173063-32-6P 173063-33-7P 173063-34-8P**
173063-35-9P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(reactive dyes for jet-printing inks)

L12 ANSWER 6 OF 12 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1994:108740 HCAPLUS
DOCUMENT NUMBER: 120:108740
TITLE: Sulfur-containing phosphoric acid ester internal release agent
INVENTOR(S): Kusumoto, Masahiko; Yamashita, Hiroyuki; Nagata, Teruyuki
PATENT ASSIGNEE(S): Mitsui Toatsu Chemicals, Inc., Japan
SOURCE: Eur. Pat. Appl., 72 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 553801	A1	19930804	EP 1993-101236	19930128
EP 553801	B1	19970423		
R: DE, FR, GB, IT				
US 5389708	A	19950214	US 1993-9761	19930127
JP 05306320	A2	19931119	JP 1993-12490	19930128
JP 3263162	B2	20020304		
AU 9332115	A1	19930805	AU 1993-32115	19930129

AU 659522 B2 19950518
PRIORITY APPLN. INFO.: JP 1992-15878 A 19920131
JP 1992-17497 A 19920203
JP 1992-19620 A 19920205
JP 1992-26471 A 19920213
JP 1992-44532 A 19920302
JP 1992-46661 A 19920304
JP 1992-48277 A 19920305
OTHER SOURCE(S): MARPAT 120:108740
AB Dialkyl (di)thiophosphoric acid esters are useful as release agents for transparent resins (e.g. polyurethanes). The release agents do not cause deterioration of transparency and are useful in manuf. of lenses.
IT **152993-40-3P**
RL: PREP (Preparation)
(prepn. of, transparent, internal release agents for)

L12 ANSWER 7 OF 12 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1993:559790 HCAPLUS
DOCUMENT NUMBER: 119:159790
TITLE: Synthesis and investigation of the nonlinear optical properties of various p-aminophenyl sulfone oligomers
AUTHOR(S): Mitchell, Michael A.; Tomida, Masayuki; Padias, Anne Buyle; Hall, H. K., Jr.; Lackritz, Hilary S.; Robello, Douglas R.; Willand, Craig S.; Williams, David J.
CORPORATE SOURCE: Dep. Chem., Univ. Arizona, Tucson, AZ, 85721, USA
SOURCE: Chemistry of Materials (1993), 5(7), 1044-51
CODEN: CMATEX; ISSN: 0897-4756
DOCUMENT TYPE: Journal
LANGUAGE: English
AB A series of p-aminophenyl sulfone oligomers (monomers, dimers, and trimers) was synthesized with the purpose of studying the effect of several consecutive dipolar units on their second-order nonlinear optical (NLO) characteristics. Three classes of oligomers were synthesized, namely with a hexamethylene, dimethylene, or piperidine spacer. The dipole moments of these oligomers and the .mu..beta.z value, as measured by EFISH (elec. field induced second harmonic generation), are reported. The results show that these compds., despite their head-to-tail arrangement, lack the structural features needed to display enhancement of the hyperpolarizability.
IT **150221-12-8P 150221-19-5P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as nonlinear optical material)

L12 ANSWER 8 OF 12 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1972:421588 HCAPLUS
DOCUMENT NUMBER: 77:21588
TITLE: 1,5-Diaryl-3-styryl-.DELTA.2-pyrazolines as fluorescent whiteners
PATENT ASSIGNEE(S): Farbwerke Hoechst A.-G.
SOURCE: Brit., 11 pp.
CODEN: BRXXAA
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 1264671		19720223		

PRIORITY APPLN. INFO.: DD 1968-5801 19680419
AB Twenty-four title compds. were prepd. having the general structure I, where R = H or Cl, X = CH:CH2 or CH2CH2Y, and Y = OH, SO3Na, alkoxy, alkylamino, aminoalkylamino, aminoalkoxy, or quaternized aminoalkoxy.

Mixts. of I and known compds. of structure II (R and X as described) imparted a higher degree of whiteness to nylon, cellulose triacetate, or polyacrylonitrile than either I or II alone. For example, a mixt. of PhCH:CHCOCH:CHPh, 4-H2NNHC6H4CH2CH2OH, alc., and HCl was refluxed, cooled, and stirred 2 hr at 0.deg. to give 90% hydroxyethyl deriv. (I, R = H, X = CH2CH2OH) (III) [26505-13-5]. III was sulfated and treated with KCl to give the K sulfate deriv. which was refluxed in aq. Me2CO, and 2N NaOH was added to give the vinyl compd. (I, R = H, X = CH:CH2) (IV) [29244-99-3]. Treatment of IV with Me2NCH2CH(OH)Me and 33% NaOH soln. for 1 hr at 60.deg. gave an aminoalkyl **ether** (I, R = H, X = CH2CH2OCHMeCH2NMe2) [29244-95-9]. The other I were similarly prepd.

IT **29244-86-8P**
RL: IMF (Industrial manufacture); PREP (Preparation)
(prepn. of)

L12 ANSWER 9 OF 12 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1966:465338 HCAPLUS
DOCUMENT NUMBER: 65:65338
ORIGINAL REFERENCE NO.: 65:12138d-h,12139a-b
TITLE: Individual racemates of N-(p-hydroxyphenylisopropyl)arterenol
INVENTOR(S): Dijk, Jan van
PATENT ASSIGNEE(S): North American Philips Co., Inc.
SOURCE: 5 pp.
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3250803		19660510	US	
PRIORITY APPLN. INFO.:			NL	19610706

AB The redn. of a tribenzyl ketone such as 3,4-(PhCH2O)2C6H3COCH2NHCHMeCH2C6H4OCH2Ph-4 (I) with NaBH4 dissolved in MeOH to give a racemic mixt., m. 55-75.degree. of 3,4 - (PhCH2O)2C6H3CH(OH)CH2NHCHMeCH2C6H4OCH2Ph - 4 (.alpha.,.beta.-II) or salts thereof is described. .alpha.,.beta.-II is sepd. by fractional crystn. of the free bases or by conversion of the free bases into a mixt. of salts and then sepg. the salt mixt. by fractional crystn. Thus, 60%, 4-BzC6H4CH:CMeNO2, m. 144-6.degree., was prepd. in the conventional manner and was then hydrogenated in the usual way to give a 74% yield of the corresponding satd. amine which was in turn treated with 3',4'-bis(benzyloxy)-2-bromoacetophenone to give a 94% yield of I.HCl, m. 204-10.degree. (decompn.). NaOH (4.40 g.) dissolved in 50 ml. H2O and 200 ml. tetrahydrofuran was added to a soln. of 67.0 g. I.HCl in 1.7 l. MeOH, 13.0 g. NaBH4 in 500 ml. MeOH and 5 ml. 2N NaOH added, the mixt. heated to boiling and refluxed 2 hrs., 1.5 l. solvent removed by evapn. in vacuo, 2 l. H2O added, another 1.6 l. of liquid distd. in vacuo, 500 ml. C6H6 added, the C6H6 layer sepd., dried, and evapd. in vacuo, the residue dissolved in 150 ml. of Et2O while heating, and the soln. cooled to room temp. to give 94% .alpha.,.beta.-II, m. 55-75.degree.. II (30 g.) in 150 ml. of Et2O was stored at room temp. 16 hrs., crystn. began, the mixt. scratched and kept an addnl. hr., and 8.3 g. crystals sepd. to give 7 g. .alpha.-II, m. 69-72.degree.. The Et2O filtrate of this fraction was stored at 0-5.degree. 1.5 hrs. to give 4 g. .beta.-II, m. 92-4.degree. (C6H6petr. **ether**). To 5.7 g. .alpha.,.beta.-II and 1.7 g. BzOH in 250 ml. EtOH was added 40 ml. H2O, the mixt. filtered, and the residue washed with 5:2 EtOH-H2O to give .alpha.-II benzoate, m. 156-8.degree. (C6H6) and .beta.-II, benzoate, m. 138.5-9.degree.. The benzoates were then converted to .alpha.-II, m. 72.degree. and .beta.-II, m. 88.degree. in the usual manner. Alternatively, 18.5 g. p-MeC6H4SO3H in 100 ml. H2O and 75 ml. Et2O added to 18.5 g. .alpha.,.beta.-II in 900 ml. EtOH, 26 g. crystals, m. 132-7.degree. (dissocn.) sepd. after 5 days at room temp.,

0.5 l. solvent evapd. from the filtrate, 3.5 g. crystals, m. 133-7.degree. sepd. after 4 more days, which dissolved **together** while shaking in a mixt. comprised of H2O 150, EtOH 50, 2N NaOH 25, and C6H6 200 ml., the aq. layer sepd. and washed with Et2O, the combined C6H6 and Et2O layers washed with H2O, dried, and evapd, to .apprx.100 ml., and 125 ml. petr. **ether** added gave 17.5 g. .beta.-II, m. 94-5.degree.. To the filtrate of the 29.5 g. crystals was added 50 ml. 2N NaOH, 600 ml. C6H6, and 1 l. H2O, the mixt. shaken, the layers sepd., the aq. layer washed with C6H6 and combined with the org. liquid layer, the combined h layers washed with H2O, dried with Na2SO4, the solvent evapd. in vacuo to .apprx.150 ml., and petr. **ether** added to give 24 g. .alpha.-II, m. 71-2.degree. (C6H6-petr. **ether**). Upon heating to 80.degree., .alpha.-II resolidified, m. 85-88.degree.. .alpha.-II benzoate thus obtained m. 156-8.degree.. To 15 ml. 1% aq. PdCl2 was added 1.5 g. C and 75 ml. H2O, the mixt. filtered, the residue washed with H2O, the hydrated catalyst added to 9.05 g. .alpha.-II benzoate in 600 ml. EtOH, the mixt. shaken with H at 1.1 atm./room temp. until absorption of the calcd. amt. of H, the catalyst filtered off, the filtrate evapd. in vacuo to .apprx.100 ml., 50 ml. H2O added, and the liquid evapd. in vacuo until turbidity, and cooled 15 hrs. at .apprx.5.degree. gave 4.8 g. .alpha.-3,4-(HO)2C6H3CH(OH)CH2NHCHMeCH2C6H4OH - 4 (.alpha.-IlI) benzoate, vitrified 102-8.degree. m. 105-10.degree., decompd. 130-3.degree.. To 1 g. .alpha.-III benzoate in 15 ml. H2O was added 1.1 ml. 2.5N NH4OH at 60.degree. to give free .alpha.-III, m. 171-3.degree. (decompn.); phenoxyacetate m. 175-6.degree. (decompn.); phenylacetate m. 156-8.degree. (decompn.). Similarly obtained was .beta.-III benzoate, vitrified 111-12.degree., m. 112.degree., decompd. 145-6.degree., and .beta.-III, m. 163-8.degree. (decompn.);' phenoxyacetate m. 175-6.5.degree. phenylacetate m. 151-4.5.degree.. .alpha. and .beta.-III are useful as bronchospasmolytics.

IT **7291-83-0**, Benzoic acid, 2-[[1-[p-[p-[[2-[p-[(4-amino-3-sulfo-1-anthraquinonyl)amino]anilino]ethyl]sulfonyl]benzamido]phenyl]-5-hydroxy-3-methylpyrazol-4-yl]azo]-5-sulfo-
(prepn. of)

L12 ANSWER 10 OF 12 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1965:29534 HCAPLUS
DOCUMENT NUMBER: 62:29534
ORIGINAL REFERENCE NO.: 62:5229d-e
TITLE: Aralkyl isothiocyanates
PATENT ASSIGNEE(S): Rhone-Poulenc S.-A.
SOURCE: 9 pp.
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
NL 64000387		19640722	NL	
PRIORITY APPLN. INFO.:			FR	19630121

AB C6H4(NCS)(Q NCS) (I) and 1,4-(SCNx)2-C6H4 (II) are prepd. by treating the appropriate diamine either with CSCl2 or with a mixt. of CS2 and an alkali hydroxide, or by treating the appropriate aralkyl halide with a thiocyanate. Thus, adding slowly with stirring 25.5 g. CSCl2 to a suspension of 11.45 g. p-H2NCH2C6H4NH2 and 21 g. CaCO3 in 100 ml. H2O at 0-20.degree. and stirring the mixt. 16 hrs. at 25.degree. yielded 7.6 g. 1-isothiocyanato-4-isothiocyanatomethylbenzene, m. 64.degree. (iso-Pr2O). Similarly prepd. were the following I (Q, position of NCS group, and m.p. given): O(CH2)5, 4, 57.degree. (C6H12); OCH2CH2, 2, 28-9.degree. (b0.2 145-55.degree.); OCH2CH2, 4, 80.degree. (C6H6-C6H12); (CH2)3, 4, 50-1.degree. (C6H12-petr.**ether**); O(CH2)8, 4, 66.degree. (C6H12), SCH2CH2, 4, 38-9.degree. (C6H12); CONHCH2CH2, 4, 127-8.degree. (C6H6);

SO2CH2CH2, 4, 97-8.degree. (C6H6C6H14); O(CH2)4, 4, 37-8.degree. (C7H16), NHCOCHO2, 4, 186.degree. (AcOEt). Also prepd. were the following II (X and m.p. given): CH2, 64.degree. (C6H12); (CH2)2, 99.degree. (C6H12); O(CH2)3, 110.degree. (C6H6); O(CH2)2, 120.degree. (C6H6-C6H12). The compds. have acaricidal and fungicidal activity.

IT **1021-56-3**, Isothiocyanic acid, diester with 2-[(p-hydroxyphenyl)sulfonyl]ethanol
(prepn. of)

L12 ANSWER 11 OF 12 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1961:64883 HCAPLUS
DOCUMENT NUMBER: 55:64883
ORIGINAL REFERENCE NO.: 55:12341d-i
TITLE: Synthesis and action of local anesthetics derived from procaine
AUTHOR(S): Buchi, J.; Enezian, J.; Enezian, G.; Valette, G.; Pattani, C.
SOURCE: Helvetica Chimica Acta (1960), 43, 1971-9
CODEN: HCACAV; ISSN: 0018-019X
DOCUMENT TYPE: Journal
LANGUAGE: French

AB To p-O2NC6H4ONa (from 42 g. p-O2NC6H4OH, 12 g. NaOH, and 45 ml. H2O) were added 62 g. K2CO3, 210 ml. xylene, and 51 g. Cl(CH2)2NEt2.HCl, the mixt. re-refluxed 60 hrs., cooled, H2O added, the mixt. extd. with xylene, the xylene layer washed, dried, and distd. to give 66 g. p-O2NC6H4O(CH2)2NEt2 (I), b0.1 145.degree.. I (66 g.) reduced catalytically in 500 ml. alc. with 5% Pd-C gave 53.1 g. p-H2NC6H4O(CH2)2NEt2 (II), b0.4 128.degree.. II (53.1 g.) in 50 ml. Et2O satd. cold with dry HCl gave 53 g. hydrochloride, m. 140-1.degree. (decompn.) (alc.). To p-O2NC6H4SK (from 60 g.) p-O2NC6H4SH, 22.4 g. KOH, and 420 ml. EtOH was added dropwise 60 g. Cl(CH2)2NEt2, the mixt. refluxed 12 hrs., cooled, filtered, evapd. in vacuo, the residue dissolved in dil. alc., the soln. extd. with Et2O, and the ext. washed, dried and evapd. to give 75 g. p-O2NC6H4S(CH2)2NEt2 (III). III could be distd. with care, b0.15 156.degree., m. 12.degree.; HCl salt m. 170-1.degree. (EtOH). III (66 g.) reduced catalytically in 500 ml. 95% EtOH with a large excess of Raney Ni gave 50.5 g. p-H2NC6H4S(CH2)2NEt2, b0.1 113.degree.. III (12.5 g.) in 50 ml. glacial HOAc was treated at 0.degree. with 44.64 ml. 3.57% H2O2, the mixt. kept 7 days at room temp., and concd. at 45.degree. in vacuo to give p-O2NC6H4SO(CH2)2NEt2 (IV) as acetate (10.6 g.), m. 66.0-7.5.degree.; HCl salt m. 188.5-90.degree.. IV (5 g.) in 200 ml. abs. alc. reduced catalytically with Raney Ni gave 3 g. p-H2NC6H4SO(CH2)2NEt2, m. 75-6.degree.. Ph(CH2)3Cl (10-12 g.) was added slowly with stirring to 40-50 ml. HNO3 (d. 1.47) at -15.degree., the mixt. poured on ice, neutralized to pH 8 with Na2CO3, extd. with Et2O, and the ext. washed, dried, and distd. to give 84.5% p-O2NC6H4(CH2)3Cl (V), b0.25 138.degree.. V (48 g.) was refluxed 6 hrs. with 42 g. Et2NH in 150 ml. dry C6H6, the mixt. filtered, the C6H6 soln. washed, dried, and distd. to give 45.5 g. p-O2NC6H4(CH2)3NEt2 (VI), b0.25 133-5.degree.. VI (45.5 g.) reduced catalytically with 10% Pd-C gave 31.5 g. p-H2NC6H4(CH2)3NEt2, b0.33 126-7.degree.; hydrochloride m. 195.5-6.5.degree. (abs. alc.). p-O2NC6H4Ac (82.5 g.), 71.5 g. Et2NH.HCl, 20 g. paraformaldehyde, 100 ml. EtOH, and 1 ml. concd. HCl was refluxed 4 hrs., 20 g. more paraformaldehyde added, the mixt. refluxed 3 hrs., filtered rapidly hot, 500 ml. dry Me2CO added, and the mixt. kept several days at 0.degree. to give 68.5-103.5 g. p-O2NC6H4CO(CH2)2NEt2 (VII) as HCl salt, m. 136.5.degree. (decompn.). VII.HCl (10 g.) was hydrogenated in 200 ml. distd. H2O with 10% Pd-C at 100-140 atm., the mixt. filtered, neutralized at 0.degree. with NH3 to pH 8.5, extd. with Et2O, the exts. washed, dried, concd. below 40.degree., and petr. **ether** added to give 80-90% p-H2NC6H4CO(CH2)2NEt2, m. 71-2.degree.; hydrochloride m. 146.degree. (decompn.) (abs. EtOH). None of the amines prepd. had surface anesthetic effects, but all were less active in local conduction anesthesia than

procaine.
IT **100862-20-2**, Acetanilide, 4'-(2-diethylaminoethylsulfonyl)-
(prepn. of)

L12 ANSWER 12 OF 12 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1952:48438 HCAPLUS
DOCUMENT NUMBER: 46:48438
ORIGINAL REFERENCE NO.: 46:8041b-i,8042a-b
TITLE: Antituberculous compounds. IX. Some dialkylaminoalkyl sulfones and related compounds
AUTHOR(S): Peak, D. A.; Watkins, T. I.
CORPORATE SOURCE: Boots Pure Drug Co. Ltd., Nottingham, UK
SOURCE: Journal of the Chemical Society, Abstracts (1951) 3292-6
CODEN: JCSAAZ; ISSN: 0590-9791
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
AB Na2S2O3 (25 g.) in 100 cc. H2O, added to 20 g. C8H17Br in 110 cc. EtOH and refluxed 3.5 hrs., gives 16 g. Na octyl thiosulfate, with 1 mol. H2O. C16H33I (7 g.), 5 g. Na2S2O3, 15 cc. EtOH, and 11 cc. H2O, refluxed 3 hrs., give 5.9 g. Na hexadecyl thiosulfate, with 2 mols. H2O. Et2NCH2CH2Br.HBr (20 g.), 76.6 cc. N NaOH, and 19 g. Na2S2O3, stirred 20 min. at 35-40.degree., give 11.8 g. Na 2-diethylaminoethyl thiosulfate, decomp. appreciably at 100.degree.; Et2NCH2CH2Cl gives the same compd. but the reaction is slower. (C8H17)2NCH2CH2Cl.HCl (4.8 g.) in 12 cc. EtOH, treated with 13.95 cc. 0.1 N NaOH and then with 3.5 g. Na2S2O3 in 7 cc. H2O, the mixt. stirred 8 hrs. at room temp. (iodine titer 50% of the original value), and the residue extd. with warm EtOH, gives 3.2 g. bis(2-dioctylaminoethyl)thiosulfate, m. 138.degree. (monopicrate, yellow); the same result is obtained with temps. from 0 to 75.degree.. Et2NCH2CH2Cl (48 g.), added to 1 mol. MeSNa in 200 cc. EtOH and refluxed 1 hr., gives 28 g. 2-diethylaminoethyl Me sulfide, b150 141-5.degree. (HCl salt, too hygroscopic for analysis). Homologs, Et2NCH2CH2sr: R = Bu (I), b2.5 82.degree.; octyl (II), b0.7 116-18.degree.; hexadecyl, b0.2 184.degree.. PrSH (24.5 g.) and 30.7 g. HO(CH2)3Cl in 200 cc. EtOH contg. 7.5 g. Na, refluxed 1.5 hrs., give 35 g. PrS(CH2)3OH (III), b16 115.degree.; 10 g. III, 6 g. C5H5, and 8 cc. CHCl3, added slowly to 8.9 g. SOCl2 in 8 cc. CHCl3 at 10-13.degree., kept overnight, and refluxed 1.5 hrs., give 9 g. PrS(CH2)3Cl, b34 104.degree.; heated 5 hrs. with 16 g. Et2NH at 120-30.degree., it yields 4.1 g. 3-diethylaminopropyl Pr sulfide, b38 138-9.degree.. Et2NCH2CH2SH.HCl (12.6 g.) in 15 cc. CHCl3, treated with 2.7 g. PrCHO, satd. at 10-15.degree. with HCl, and warmed 1 hr. at 50.degree., gives 7 g. butyraldehyde bis(2-diethylaminoethyl)mercaptal, yellow, b0.7 151-2.degree.; di-HCl salt, m. 188-9.degree.; mono-HCl salt, m. 209-10.degree.. II (15 g.) in 61 cc. N HCl, treated with 13 cc. 18% H2O2 (temp. not above 28.degree.), gives 11 g. 2-diethylaminoethyl octyl sulfoxide, b0.1 138-40.degree. (reineckate, m. 106-7.degree.). I (7 g.) in 5 cc. 50% aq. AcOH, treated at 0-3.degree. with 160 cc. 3% KMnO4 in 5% AcOH, gives 3.2 g. Bu 2-diethylaminoethyl sulfone, b3 144.degree.; octyl homolog, b0.1 152.degree. (reineckate, m. 122.degree.); hexadecyl homolog, b0.07 205-6.5.degree. (reineckate, m. 132.degree.). C8H17SH (5.84 g.) in 50 cc. EtOH contg. 0.92 g. Na and 3.85 g. (ClCH2CH2)2NMe. HCl in 50 cc. EtOH contg. 0.46 g. Na, refluxed 2 hrs. and the product (3.9 g., b0.5 180-6.degree.) oxidized with KMnO4, give 1.9 g. methylbis(2-octylsulfonylethyl)amine, m. 185.degree. (HCl salt, m. 197.degree.). Et2NCHCH2Cl (40 g.) in 309 cc. BuOH contg. 6.9 g. Na, heated 15 hrs. on the steam bath, gives 38 g. Bu 2-diethylaminoethyl **ether**, b200 144.degree. [reineckate, m. 122.degree. (decompn.)]; octyl homolog, b10 130-3.degree.. C7H15Br (6 g.) and 12 g. Et2NH, heated 4 hrs. at 130.degree., give 4.8 g. crude C7H15NEt2 which, distributed between petr. **ether** and N HCl, gives the pure amine, b200 156.degree.. C11H23Br (10 g.), 7 g. Et2NH, and 10 cc. xylene, heated 5 hrs. at 170.degree., give 7.5 g. N,N-diethylhendecylamine, b2 85-6.degree. (reineckate, m.

71.degree.). C9H19COMe (8.5 g.), 3 g. (HCHO)3, 5.5 g. Et2N.HCl, 0.2 cc. concd. HCl, 20 cc. C6H6, and 20 cc. PhNO2, heated 45 min. at 110.degree. and 15 min. at 145.degree., give 6.9 g. 2-diethylaminoethyl nonyl ketone, b0.5 118-22.degree.. (Et2NCH2CH2)2S (4.6 g.) in 15 cc. ice-cold H2O, treated with a slight excess of Br-H2O, gives 5.5 g. bis(2-diethylaminoethyl) sulfoxide-2HBr, m. 224.degree. (decompn.); KMnO4 in 50% AcOH gives 6.4 g. bis(2-diethylaminoethyl) sulfone-2HCl, m. 202.degree.. Et2NCH2CH2SH.HCl (m. 172-3.degree.), exposed overnight to air, gives the disulfide-2HCl, m. 220.degree.. Et2NCH2CH2Cl (27 g.), added to the Na salt from 35 g. p-AcNHC6H4SO2H in 500 cc. EtOH and refluxed 1.5 hrs., gives 3 g. of an unknown compd., m. 284.degree. (N, 7.2%), and, on extn. of the residue from the filtrate with 2 N HCl, 16 g. of the N-Ac deriv., m. 93-4.degree., of p-aminophenyl 2-diethylaminoethyl sulfone, m. 55.degree.. p-MeC6H4SO2CH2OH (2 g.) and 1.14 g. PhNMe in 75 cc. **ether** quickly give 2.05 g. N-(p-tolylsulfonylmethyl)aniline, m. 109.degree.. N4-(p-Tolylsulfonylmethyl)sulfanilamide, m, 166-7.degree.; 2-methyl-5-(p-tolylsulfonylmethylamino)-1,3,4-oxadiazole, m. 170.degree.; 4-(p-tolylsulfonylmethyl)morpholine, m. 86-9.degree.. The activities of compds. against Mycobacterium tuberculosis are reported; the sulfides are outstandingly active in vitro; the sulfones have a low order of activity; the one sulfoxide had intermediate activity.

IT **100862-20-2**, Acetanilide, 4'-(2-diethylaminoethylsulfonyl)-
(prepn. of)

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=> d stat que
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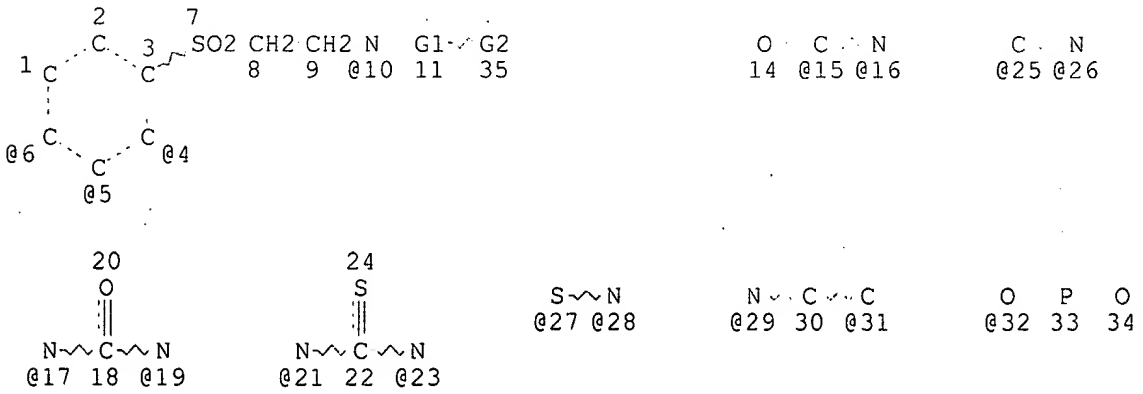

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STEREO ATTRIBUTES: NONE
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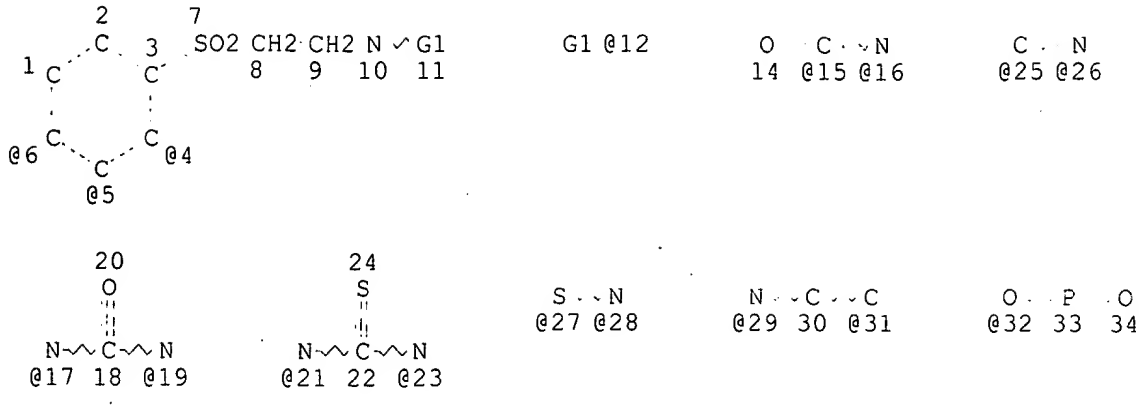

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NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
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RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 33

STEREO ATTRIBUTES: NONE

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L9            1 SEA FILE=REGISTRY ABB=ON  PLU=ON  OLIGOETHER/BI
L10         168 SEA FILE=REGISTRY ABB=ON  PLU=ON  POLYETHER/BI OR POLYETHERS/BI

L11     1273885 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L9 OR L10 OR ?ETHER?
L12          12 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L11 AND L8
L13           0 SEA FILE=HCAPLUS ABB=ON  PLU=ON  (L8 AND (MARKER? OR ?SPECTRO?)
                ) NOT L12


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L5              STR
L6  (         4)SEA FILE=REGISTRY SUB=L4 SSS FUL L5
L7          289 SEA FILE=REGISTRY ABB=ON  PLU=ON  L4 NOT L6
L8           91 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L7
L9            1 SEA FILE=REGISTRY ABB=ON  PLU=ON  OLIGOETHER/BI
L10         168 SEA FILE=REGISTRY ABB=ON  PLU=ON  POLYETHER/BI OR POLYETHERS/BI

L11     1273885 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L9 OR L10 OR ?ETHER?
L12          12 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L11 AND L8
L17        3985 SEA FILE=REGISTRY ABB=ON  PLU=ON  PORPHYRIN OR HEXAHISTIDINE
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L18      162196 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L17 OR PORPHYRIN OR HEXAHISTID
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L6   (         4) SEA FILE=REGISTRY SUB=L4 SSS FUL L5
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L8            91 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L7
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L10          168 SEA FILE=REGISTRY ABB=ON  PLU=ON  POLYETHER/BI OR POLYETHERS/BI

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                  L12
L24            7 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L23 NOT L12


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L24  ANSWER 1 OF 7  HCAPLUS  COPYRIGHT 2003 ACS
ACCESSION NUMBER:         2001:933984  HCAPLUS
DOCUMENT NUMBER:          136:55223
TITLE:                    Sulfo- and phenylaminosulfonyl-substituted
                          phthalocyanine compounds for ink-jet printing
INVENTOR(S):              Kenworthy, Mark
PATENT ASSIGNEE(S):       Avecia Limited, UK
SOURCE:                   U.S., 12 pp.
                          CODEN: USXXAM
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.        KIND  DATE           APPLICATION NO.   DATE
     ---------------   ----  --------       ---------------   --------
     US 6332918         B1   20011225       US 1999-250179    19990216
PRIORITY APPLN. INFO.:                   GB 1998-3232     A  19980217
OTHER SOURCE(S):          MARPAT 136:55223
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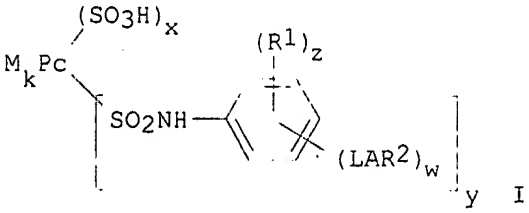


I

AB The substituted phthalocyanine dyes I were synthesized and used as colorants in inks for ink-jet printing, where M = H, **metal**, halometal, oxymetal or hydroxymetal, Pc = phthalocyanine nucleus, L = a linking group comprising an optionally substituted C1-30 hydrocarbyl, A = O, S, NR3, R1 = optional substituent or optionally substituted C1-15 hydrocarbyl, R 2 = optionally substituted C1-30 hydrocarbyl having .gtoreq.1 alkyl group substituted with .gtoreq.1 hydroxy, carboxy and sulfo, R3 = H or optionally substituted C1-30 hydrocarbyl, k = half of the valence of M, z = 0-4, w = 1-5, (w+z) = 1-5, x, y = nonzero no., (x+y) = 1-6, and the optional substituent comprising .gtoreq.1 carboxy, sulfo, hydroxy, amino, mercapto, cyano, nitro and halo. The phthalocyanine

colorants produce prints with good optical d., light and water fastness.

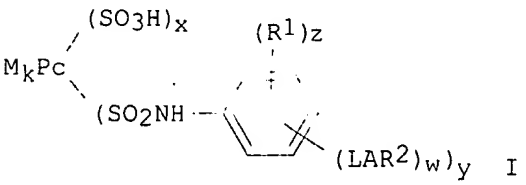
IT **288271-12-5P 288271-13-6P 288271-14-7P**
288271-18-1P 288271-20-5P 288271-21-6P
382145-28-0P 382145-29-1P 382145-30-4P
382145-31-5P 382145-32-6P 382145-33-7P
382145-34-8P 382145-35-9P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(Sulfo- and phenylaminosulfonyl-substituted phthalocyanine compds. for ink-jet printing)

REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 2 OF 7 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2000:610569 HCAPLUS
DOCUMENT NUMBER: 133:178901
TITLE: Sulfo- and phenylaminosulfonyl-substituted phthalocyanine dyes and their use in ink-jet inks
INVENTOR(S): Kenworthy, Mark
PATENT ASSIGNEE(S): Avecia Ltd., UK
SOURCE: Brit. UK Pat. Appl., 27 pp.
CODEN: BAXXDU
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 2341868	A1	20000329	GB 1999-27927	19991126

PRIORITY APPLN. INFO.: GB 1999-27927 19991126
OTHER SOURCE(S): MARPAT 133:178901
GI



I

AB The substituted phthalocyanine dyes I (M = H, **metal** halometal, oxymetal, hydroxymetal; Pc = phthalocyanine nucleus; L = link group comprising a optionally substituted C1-30 hydrocarbyl; A = O, S, NR3; R1 = optional substituent, optionally substituted C1-15 hydrocarbyl; R2 = optionally substituted C1-30 hydrocarbyl having .gtoreq.1 alkyl substituted with .gtoreq.1 OH, carboxy and sulfo; R3 = H, optionally substituted C1-30; k = half of the valency of M; z = 0-4; w = 1-5; w + z = 1-5; x,y = nonzero no.; x + y = 1-6; optional substituent contg. .gtoreq.1 carboxy, sulfo, hydroxy, amino, mercapto, cyano, nitro and halo), are as colorants in ink-jet inks having good optical d., and water and light fastness.

IT **288271-12-5P 288271-13-6P 288271-14-7P**
288271-18-1P 288271-20-5P 288271-21-6P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(dye; sulfo- and phenylaminosulfonyl-substituted phthalocyanine dyes for ink-jet inks)

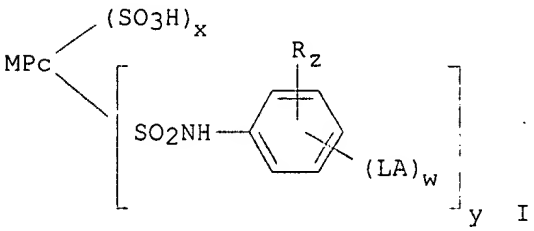
L24 ANSWER 3 OF 7 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1999:194213 HCAPLUS
DOCUMENT NUMBER: 130:238784
TITLE: Phthalocyanine dyes, their preparation and their use in ink-jet inks
INVENTOR(S): Gregory, Peter; Kenworthy, Mark
PATENT ASSIGNEE(S): Zeneca Limited, UK
SOURCE: PCT Int. Appl., 27 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9913009	A1	19990318	WO 1998-GB2545	19980824
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 9888713	A1	19990329	AU 1998-88713	19980824
EP 1009775	A1	20000621	EP 1998-940373	19980824
EP 1009775	B1	20030521		
R: CH, DE, FR, GB, LI				
JP 2001515943	T2	20010925	JP 2000-510807	19980824
US 6235097	B1	20010522	US 2000-486832	20000302

PRIORITY APPLN. INFO.: GB 1997-18876 A 19970905
WO 1998-GB2545 W 19980824

OTHER SOURCE(S): MARPAT 130:238784
GI



I

AB The phthalocyanine dyes (I; M = H or **metal**; Pc = phthalocyanine; L = optionally substituted C1-30-hydrocarbondiyl linking group; A = a group comprising at least one of: amino and optionally substituted C1-30-hydrocarbyl comprising at least one protonable nitrogen atom; but where A comprises other than an alkyl group substituted by at least one of: hydroxy, carboxy and sulfo; R = a group independently comprising at least one of: an optional substituent and optionally substituted C1-15-hydrocarbyl; independently comprising at least one of: an optional substituent and optionally substituted C1-15hydrocarbyl; z = 0-4; w = 1-5; w + z = 1-5; x, y are non-zero nos.; the mean of x + y = .apprx.1-6) or their salts or other forms are colorants for ink-jet inks. The colorants produce prints with good optical d. and fastness properties. In an example, CuPc(SO2Cl)4 was treated with p-aminophenyl 2-sulfatoethyl sulfone, water, and 1-(2-aminoethyl)piperazine to give a dye, which was used in its ammonium salt form for printing.

IT **221356-40-7P 221356-42-9P 221356-44-1P**

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(dye; prepn. of phthalocyanine dyes for water-based ink-jet inks)

IT **104994-15-2 104994-17-4 105038-63-9**
RL: TEM (Technical or engineered material use); USES (Uses)
(phthalocyanine dyes for water-based ink-jet inks)

IT **221355-13-1P 221355-15-3P 221355-17-5P**
RL: IMF (Industrial manufacture); RCT (Reactant); TEM (Technical or engineered material use); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(prepn. of phthalocyanine dyes for water-based ink-jet inks)

REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 4 OF 7 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1996:91807 HCAPLUS
DOCUMENT NUMBER: 124:120109
TITLE: Dyes with hydrolytically stable reactive groups, their preparation and their use
INVENTOR(S): Eltz, Andreas
PATENT ASSIGNEE(S): Hoechst A.-G., Germany
SOURCE: Ger. Offen., 19 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 4417719	A1	19951123	DE 1994-4417719	19940520

PRIORITY APPLN. INFO.: DE 1994-4417719 19940520
OTHER SOURCE(S): MARPAT 124:120109
AB The dyes Z(G-E-A-N-MCN)n (A = optionally halogenated alkylene; E = CO, SO2; G = direct bond, imino; M = H, alkali or alk. earth **metal**, ammonium; Z = azo or other dye chromophore; n = 1-4) are obtained by treating a sulfate ester or vinyl sulfone precursor with cyanamide. The dyes are storage stable and suitable for textile dyeing or printing. Thus, C.I. Reactive Black 5 was treated with cyanamide to give a dye with 2 cyanamidoethylsulfonyl groups. The dye was used for single-phase printing of cellulosics.

IT **173063-32-6P 173063-33-7P 173063-34-8P**
173256-06-9P 173256-07-0P 173256-08-1P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(dyes with hydrolytically stable reactive groups)

L24 ANSWER 5 OF 7 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1994:144163 HCAPLUS
DOCUMENT NUMBER: 120:144163
TITLE: Topical ophthalmic compositions comprising a combination of calcium antagonists with known antiglaucoma agents
INVENTOR(S): Desantis, Louis, Jr.
PATENT ASSIGNEE(S): Alcon Laboratories, Inc., USA
SOURCE: PCT Int. Appl., 20 PP.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

WO 9323082	A1	19931125	WO 1993-US4505	19930512
W: AU, CA, JP				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9342467	A1	19931213	AU 1993-42467	19930512
EP 639986	A1	19950301	EP 1993-911276	19930512
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
JP 07508030	T2	19950907	JP 1993-503718	19930512

PRIORITY APPLN. INFO.: US 1992-882328 19920513
WO 1993-US4505 19930512

AB Calcium antagonists and compds. which lower intraocular pressure are combined in ophthalmic compns. to treat glaucoma. The calcium antagonists prevent or reduce the loss of visual field, while the intraocular pressure-lowering compds. maintain the intraocular pressure at normal levels.

IT **125651-31-2**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(calcium antagonist, ophthalmic compns. contg. intraocular pressure-lowering agents and, for glaucoma treatment)

L24 ANSWER 6 OF 7 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1980:52415 HCAPLUS
DOCUMENT NUMBER: 92:52415
TITLE: Enkephalin analogs. Introduction of stereochemical constraints, **metal** binding sites and fluorescent groups
AUTHOR(S): Nagaraj, R.; Sudha, T. S.; Shivaji, S.; Balaram, P.
CORPORATE SOURCE: Mol. Biophys. Unit, Indian Inst. Sci., Bangalore, 560012, India
SOURCE: FEBS Letters (1979), 106(2), 271-4
CODEN: FEBLAL; ISSN: 0014-5793
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A no. of enkephalin analogs were synthesized and evaluated as to biol. activity, with the latter being detd. from the recovery time for normal movement following injection of the peptides into the brain of mice. Activity was enhanced by replacement of the Gly2 or Gly2.cntdot.Gly3 residues with .alpha.-aminoisobutyryl residues, indicating that restriction of the available conformations at positions 2 and 3 would not necessarily decrease biol. activity. Analogs that were fluorescent or were capable of binding paramagnetic NMR shift probes are also described. Relations between biol. activity and the structural conformations of the analogs are discussed.

IT **72564-55-7**
RL: BIOL (Biological study)
(behavior response to, structure in relation to).

L24 ANSWER 7 OF 7 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1969:525974 HCAPLUS
DOCUMENT NUMBER: 71:125974
TITLE: Monoazonaphthol dyes for cotton
PATENT ASSIGNEE(S): Farbwerke Hoechst A.-G.
SOURCE: Fr. Addn., 21 pp. Addn. to Fr. 1447780
CODEN: FAXXA3
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 91572		19680705		

PRIORITY APPLN. INFO.: DE 19651224

GI For diagram(s), see printed CA Issue.

AB The title compds. of general formula I where one of X, Y, and Z = NHCONHC6H4SO2R1-x (Q), or their Co, Cr, and Cu complexes are prepd. by treating 1 (2 or 3), 5,7-H2N(HO)C10H5SO3H with x-R1O2SC6H4NCO (II), coupling with diazotized RNH2, and metallizing. In two alternative processes the acylation is made the final step or x-PhO2CNHC6H4SO2R1 may be used instead of II. The acylation is preferably carried out in H2O or a mixt. of H2O with C6H6, PhCl, or Me2CO at 0-50.degree. and neutral pH. I (R1 = CH2CH2SSO3H) are prepd. by treating I (R = CH2CH2Cl or CH:CH2) with Na2S2O3. When applied to cotton the dyes are fast to washing. For example, a soln. of 23.9 parts 3,5,7-H2N(HO)C10H5SO3H in 200 parts H2O was stirred with 33% aq. NaOH to give pH 6-7, treated with a soln. of 35 parts II (X = 3, R1 = CH2CH2Cl) (III) in 100 parts PhCl at 40-50.degree., followed during 1 hr., by 200 parts H2O. On completion of the reaction PhCl was distd. in vacuo, the residue dild. to 500 parts with H2O and treated with a soln. of diazotized 30.3 parts 1,5,2-(HO3S)2C10H5NH2 to give I (R = 1,5,2-(HO3S)2C10H5, X = Q, x = 3, R1 = CH2CH2Cl, Y = Z = H) (Ia), which dyed fast yellowish red shades on cotton. The following I were prepd. by analogous processes (R, X, Y, Z, x, R1, and shade on cotton given): 2-HO2CC6H4, Q, SO3H, H, 4, CH:CH2, red; 2,4,5-H-O3S(Me)(Cl)C6H2, Q, SO3H, H, 4, CH2CH2Cl, red; 4-HO3SC6H4, Q, H, H, 2, CH2CH2Cl, scarlet; 2,4,5-HO3S(Me)(Cl)C6H2, Q, SO3H, H, 3, CH2CH2OPh, scarlet; 1,5,2-(HO3S)2C10H5, Q, SO3H, H, 3, CH2CH2OAc, red. 2,5-(HO3S)2C6H3NH2 (253 parts) was diazotized and coupled with 2,5,7-(AcNH)(HO)C10H5SO3H in 2000 parts H2O and pH 6.5-7.0. NaOH liquor (940 parts) was added and the soln. was boiled under reflux for 4 hrs., adjusted to pH 6-7 with 37% aq. HCl, cooled to room temp., treated with a soln. of 500 parts III in 1200 parts PhCl at 40.degree., and after 12 hrs. PhCl distd. in vacuo. The residual soln. gave I [R = 2,5-(HO3S)2C6H3, X = Z = H, Y = Q, x = 3, R1 = CH2CH2Cl], orange on cotton. A soln. of 23.9 parts 2,5,7-(H2N)(HO)C10H5SO3H (IV) in 200 parts H2O contg. 33% aq. NaOH to give pH 6.5-7.0 was treated with 30 parts II (x = 3, R1 = CH:CH2) in 60 parts Me2CO, heated to 70-5.degree., treated with 26 parts Na2S2O3.5H2O (the pH held at 5.8-6.3 using HOAc during 3 hrs.) followed by 1000 parts H2O and the soln. salted to give 2,5,7-Q(HO)C10H5SO3H (x = 3, R1 = CH2CH2SSO3H) (V). 3-HO3SC6H4NH2 (17.3 parts) was diazotized and coupled with the moist cake of V to give I (R = 3-HO3SC6H4, X = Z = H, Y = Q, x = 3, R1 = CH2CH2SSO3H), orange on cotton. A mixt. of 60.4 parts 2,8,3,6-Q(HO)C10H4(SO3H)2 (VI, x = 4, R1 = CH:CH2) in 350 parts H2O was stirred with 14 parts Et2NH and 33% aq. NaOH at pH 10.5-11.0 for 4 hrs. and salted to give VI, (x = 4, R1 = CH2CH2NEt2) which was coupled with diazotized 17.3 parts 4-HO3SC6H4NH2 to give I (R = 4-HO3SC6H4, X = Q, Y = SO3H, Z = H, x = 4, R1 = CH2CH2NEt2), yellowish red on cotton. A neutral soln. of 478 parts 4-HO3SO-CH2CH2O2SC6H4NH2 in 3400 parts H2O was treated dropwise at pH 6-7 with 340 parts HCO2Ph to give 4-HO3SOCH2CH2SO2-C6H4NHCO2Ph (VII). A neutral soln. of 239 parts IV in 3000 parts H2O was stirred at 50-60.degree., treated with VII during 3 hrs. (pH 6.8-7.2 held with satd. aq. Na2CO3 soln.), stirred for 5 hrs. at 50-60.degree., cooled to room temp. and coupled with diazotized 1,5,2-(HO3S)2C10H5NH2 (303 parts) to give I (R = 1,5,2-(HO3S)2C10H5, X = Z = H, Y = Q, x = 4, R1 = CH2CH2OSO3H), orange on cotton. 2,5-HO(HO3S)C6H3NH2 (VIII) (18.9 parts) was diazotized and coupled with the product from 23.9 parts IV and 30 parts III. The product was stirred with 25 parts CuSO4.5H2O in 1000 parts H2O at 50-60.degree. and pH 5.0-5.5 (Na2CO3) for 4 hrs. to give the Cu complex of I [R = 2,5-HO(HO3S)C6H3, X = Z = H, Y = Q, x = 3, R1 = CH2CH2Cl], bluish red on cotton. 2-HO2CC6H4NH2 (13.7 parts) was diazotized and coupled with 50.7 parts 2,5,7-Q(HO)-C10H5SO3H (x = 3, R1 = CH2CH2Cl) (IX) at pH 6.5-7.0. Chrome alum (25 parts) was added and the soln. stirred at 95.degree. and pH 5-6 for 8 hrs. to give the Cr complex of I (R = 2-HO2CC6H4, X = Z = H, Y = Q, x = 3, R1 = CH2CH2Cl) brown on cotton. VIII (18.9 parts) was diazotized and coupled with 23.9 parts 2,8,6-H2N(HO)C10H5SO3H, the product treated with 14 parts CoSO4.7H2O and 30 parts III to give the Co complex of I [R = 2,5-HO(HO3S)C6H3, X = Q, Y =

Z = H, x = 3, R1 = CH2CH2Cl], bluish brown on cotton. Replacement of the CoSO4.-7H2O by chrome alum gave the bluish violet Cr analog. 2,6,8-H2NC10H5(SO3H)2 (30.3 parts) was diazotized and coupled with 50.7 parts IX the product oxidatively copperized to give the Cu complex of I [R = 1,6,8,2-HO(HO3S)2C10H4, X = Z = H, Y = Q, x = 3, R1 = CH2CH2Cl], violet on cotton. 2,4-(Me-O)(HO3S)C6H3NH2 (40.6 parts) was diazotized and coupled with the product from 47.8 parts 5,7,1-HO(HO3S)C10H5NH2 and 60 parts III to give I [R = 2,4-MeO(HO3S)C6H3, X = Y = H, Z = Q, x = 3, R1 = CH2CH2Cl], red on cotton, Cu complex, violet, Ia (79.9 parts) was stirred in 1000 parts H2O at pH 6.5-7.0 with 26 parts Na2S2O3.5H2O at 90-5.degree. for 3 hrs. to give the R1 = CH2CH2SSO3H analog, yellowish red on cotton.

IT **24273-68-5P**

RL: IMF (Industrial manufacture); PREP (Preparation)
(prepn. of)

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=> d stat que l36 nos
L3                STR
L4   (       293)SEA FILE=REGISTRY SSS FUL L3
L5                STR
L6   (         4)SEA FILE=REGISTRY SUB=L4 SSS FUL L5
L7           289 SEA FILE=REGISTRY ABB=ON  PLU=ON  L4 NOT L6
L8            91 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L7
L9             1 SEA FILE=REGISTRY ABB=ON  PLU=ON  OLIGOETHER/BI
L10          168 SEA FILE=REGISTRY ABB=ON  PLU=ON  POLYETHER/BI OR POLYETHERS/BI

L11      1273885 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L9 OR L10 OR ?ETHER?
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L23            7 SEA FILE=HCAPLUS ABB=ON  PLU=ON  (L8 AND (ION OR METAL)) NOT
                  L12
L24            7 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L23 NOT L12
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L26        88162 SEA FILE=REGISTRY ABB=ON  PLU=ON  LITHIUM/BI
L27       272500 SEA FILE=REGISTRY ABB=ON  PLU=ON  SODIUM/BI
L28       105348 SEA FILE=REGISTRY ABB=ON  PLU=ON  POTASSIUM/BI
L29        79953 SEA FILE=REGISTRY ABB=ON  PLU=ON  MAGNESIUM/BI
L30        74829 SEA FILE=REGISTRY ABB=ON  PLU=ON  CALCIUM/BI
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                  ALUMINUM
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L36           26 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L35 NOT (L12 OR L24)


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L36  ANSWER 1 OF 26  HCAPLUS  COPYRIGHT 2003 ACS
ACCESSION NUMBER:         2003:335065  HCAPLUS
DOCUMENT NUMBER:          138:368620
TITLE:                    Preparation of 2-chloro-5-nitrobenzamides as lipid
                          modulators for treatment of osteoporosis and diabetes
INVENTOR(S):              Amemiya, Yoshiya; Wakabayashi, Kenji; Takaishi,
                          Sachiko; Kitayama, Ken
PATENT ASSIGNEE(S):       Sankyo Company, Limited, Japan
SOURCE:                   PCT Int. Appl., 221 pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:            Patent
LANGUAGE:                 Japanese
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.          KIND  DATE          APPLICATION NO.  DATE
     ------------------  ----  --------      ---------------  --------
     WO 2003035602        A1   20030501      WO 2002-JP11068  20021024
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
             UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD,
             RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
             CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
             PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,
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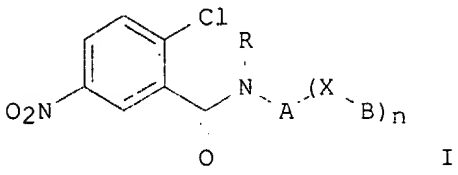
NE, SN, TD, TG
PRIORITY APPLN. INFO.: JP 2001-327189 A 20011025
GI



I

AB The title compds. I [wherein A = (un)substituted Ph, naphthyl, acenaphthenyl, Py, (iso)quinolyl, pyrimidyl, (benzo)furyl, pyranyl, chromanyl, (benzo)thienyl, pyrrolyl, (iso)indolyl, imidazolyl, pyrazolyl, pyridazinyl, pyrazinyl, (iso)oxazolyl, pyrrolidinyl, piperidyl, piperazyl, benzoxazolyl, benzoisooxazolyl, (iso)thiazolyl, benzothiazolyl, or biphenyl; B = (un)substituted aryl, cycloalkyl, or heterocyclyl; R = H or alkyl; X = a bond, O, S, CH2, CO, NH, SO2NH, NHSO2, CONH, NHCO, or OCH2; n = 0-1] and pharmaceutically acceptable salts thereof are prepd. as lipid modulators for treatment of osteoporosis and diabetes. For example, 4-phenylaniline hydrochloride was reacted with 2-chloro-5-nitrobenzoyl chloride in pyridine to afford N-(4-phenylphenyl)-2-chloro-5-nitrobenzamide. The above N-(4-phenylphenyl)-2-chloro-5-nitrobenzamide showed IC50 of 1.9 nM against human PPAR .gamma.. I are useful for the treatment of osteoporosis, and diabetes, etc.

IT **518981-72-1P**
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(drug candidate; prepn. of chloro(nitro)benzamides as lipid modulators for treatment of osteoporosis and diabetes)

IT **518981-73-2P**
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug candidate; prepn. of chloro(nitro)benzamides as lipid modulators for treatment of osteoporosis and diabetes)

IT **824-78-2**
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of chloro(nitro)benzamides as lipid modulators for treatment of osteoporosis and diabetes)

REFERENCE COUNT: 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L36 ANSWER 2 OF 26 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2002:918308 HCAPLUS
DOCUMENT NUMBER: 138:5591
TITLE: Cationic dyes bearing aminoethylsulfonylphenyl groups
INVENTOR(S): Hara, Koichi
PATENT ASSIGNEE(S): Nippon Chemical Works Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

JP 2002348492	A2	20021204	JP 2001-155043	20010524
CN 1388183	A	20030101	CN 2002-120187	20020524

PRIORITY APPLN. INFO.: JP 2001-155043 A 20010524
OTHER SOURCE(S): MARPAT 138:5591

AB The dyes are D[C6H2RaRb(SO2C2H4NR1aR1b)]n (D = azo, anthraquinone, phthalocyanine dye structure; Ra, Rb = H, halo, C1-3 alkyl, C1-3 alkoxy; R1a, R1b = H, C1-4 alkyl, C1-3 hydroxyalkyl, ZaNR2aR2b; Z = C1-4 alkylene; R2a, R2b = H, C1-3 alkyl, C1-3 hydroxyalkyl; n = 1-3). Thus, 4-(.beta.-sulfatoethylsulfonyl)aniline was substituted with 2'-dimethylaminoethyl-2-dimethylaminoethylamine to give 4-[2-(2'-dimethylaminoethyl-2-dimethylaminoethylamino)ethylsulfonyl]anilin e, which was diazotized, coupled with m-phenylenediamine-4-sulfonic acid, pptd. with NaCl, filtrated, and dried to give 2,4-diamino-5-[4-[2-(2'-dimethylaminoethyl-2-dimethylaminoethylamino)ethyl]sulfonyl]azobenzenesulf onic acid showing good light and moisture fastness.

IT **477284-34-7P**
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(manuf. of cationic dyes bearing aminoethylsulfonylphenyl groups)

IT **477284-35-8P 477284-36-9P 477284-37-0P**
477284-40-5P 477284-42-7P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(manuf. of cationic dyes bearing aminoethylsulfonylphenyl groups)

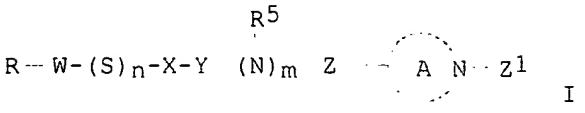
IT **2580-78-1**, C.I. Reactive Blue 19 **40492-14-6**
RL: RCT (Reactant); RACT (Reactant or reagent)
(manuf. of cationic dyes bearing aminoethylsulfonylphenyl groups)

L36 ANSWER 3 OF 26 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2002:72049 HCAPLUS
DOCUMENT NUMBER: 136:134784
TITLE: Preparation of hydrocarbyl sulfone derivatives as inhibitors of activated blood coagulation factor X and process for their production
INVENTOR(S): Kubo, Keiji; Miyawaki, Toshio; Kawamura, Masaki
PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan
SOURCE: PCT Int. Appl., 252 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002006234	A1	20020124	WO 2001-JP6148	20010717
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2001069531	A5	20020130	AU 2001-69531	20010717
JP 2002201178	A2	20020716	JP 2001-216830	20010717
EP 1302462	A1	20030416	EP 2001-948032	20010717
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				

PRIORITY APPLN. INFO.: JP 2000-221065 A 20000717
WO 2001-JP6148 W 20010717

OTHER SOURCE(S): MARPAT 136:134784
GI



I

AB Compds. represented by the general formula (I) or salts thereof [wherein R = (un)substituted cyclic hydrocarbyl or heterocyclyl; W = a bond, (un)substituted divalent hydrocarbon chain; X = (un)substituted divalent hydrocarbon group; Y, Z = NR6, CO, SO, SO2, CH2, NR6CO, COCH2, a bond; ring A = (un)substituted N-contg. heterocyclyl; R5, R6 = H, (un)substituted hydrocarbyl, (un)substituted alkoxy, optionally esterified or amidated carboxyl, (un)substituted acyl; or R5 is linked to the substituent of X or that of the ring A to form a ring; Z1 = (un)substituted imidoyl or N-contg. heterocyclyl; n = 0,1,2; m = 0,1] or salts thereof, which inhibit activated blood coagulation factor X (no data), are prepd. These compds. are useful as anticoagulants for the treatment or prevention of myocardial infarction, cerebral thrombosis, deep venous thrombosis, pulmonary thromboembolism, or thromboembolism during or after surgery. Thus, a soln. of 3-[(6-chloro-2-naphthyl)sulfonyl]propanoic acid (prepn. given), 4-methylamino-1-(2-methyl-4-pyridyl)piperidine (prepn. given), DMTMM in THF was stirred at room temp. for 16 h to give 38% 3-[(6-chloro-2-naphthyl)sulfonyl]-N-methyl-N-[1-(2-methyl-4-pyridyl)-4-piperidinyl]propanamide (II). A capsule and tablet formulation contg. II were prepd.

IT **392328-93-7P**, N-[2-[(6-Chloro-2-naphthyl)sulfonyl]ethyl]-N'-methyl-N'-[1-(4-pyridyl)-4-piperidinyl]urea
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of hydrocarbyl sulfone derivs. as inhibitors of activated blood coagulation factor X and anticoagulants for therapeutic agents)

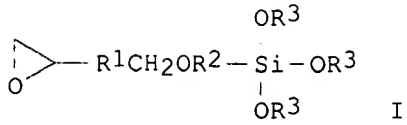
IT **194853-49-1P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of hydrocarbyl sulfone derivs. as inhibitors of activated blood coagulation factor X and anticoagulants for therapeutic agents)

REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L36 ANSWER 4 OF 26 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2000:511714 HCAPLUS
DOCUMENT NUMBER: 133:127459
TITLE: Hard coat composites for optical components
INVENTOR(S): Uchida, Naoki
PATENT ASSIGNEE(S): Ito Optical Industrial Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 16 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000206305	A2	20000728	JP 1999-7123	19990114

PRIORITY APPLN. INFO.: JP 1999-7123 19990114
GI



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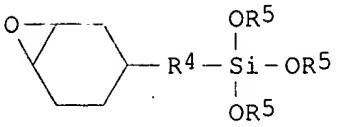
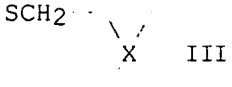


II



III

AB The matrix of the hard coat comprises a hydrolyzate of an alkoxysilane deriv. having a component consisting of a trialkoxysilane contg. a mono-epoxy group I (R1 =H, CH3; R2 = C1-4 alkylene; R3 = C1-4 alkyl) or II (R4 = C1-4 alkylene; R5 = C1-4 alkyl) having an auxiliary component (< 20%) comprising an alkoxysilane Si(OR6)4 (R6 = C1-4 alkyl). The dispersants (av. particle diams. 1-50 nm) of the hard coat comprise the main component TiO2, the auxiliary component SiO2 and the minor components ZrO2 and K2O, where SiO2/TiO2 = 0.19-0.21; ZrO2/TiO2 = 0.0015-0.0023; K2O/TiO2 = 0.0012-0.012; and the dispersant/the matrix = 0.4-1. The hard coat is formed on an org. glass layer which comprises: a (co)polymer of .gtoreq.1 activated H-contg. compd. selected from polyol, polythiol and hydroxy compds. contg. mercapto group; or a (co)polymer of .gtoreq.1 episulfide comprising >2 of III (X = S, O; S > 50%) having a ring structure. Optionally, a primer layer is interposed between the hard coat and the org. glass layer. An antireflective layer may be formed on the hard coat.

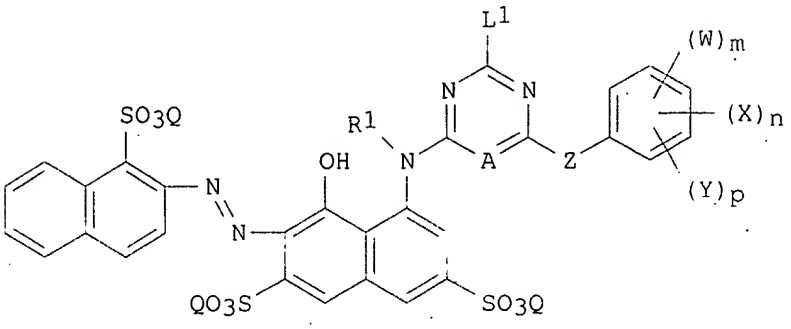
IT **12136-45-7**, **Potassium** oxide (K2O), uses
128603-98-5
RL: DEV (Device component use); USES (Uses)
(hard coat composites for optical components)

L36 ANSWER 5 OF 26 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1999:48766 HCAPLUS
DOCUMENT NUMBER: 130:111502
TITLE: Monoazo dyes and inks containing them
INVENTOR(S): Kenworthy, Mark
PATENT ASSIGNEE(S): Zeneca Limited, UK
SOURCE: PCT Int. Appl., 27 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9901510	A1	19990114	WO 1998-GB1853	19980624
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9881218	A1	19990125	AU 1998-81218	19980624

EP 994924	A1	20000426	EP 1998-930942		19980624
EP 994924	B1	20021023			
R: BE, CH, DE, FR, GB, IT, LI					
JP 2002508806	T2	20020319	JP 1999-506616		19980624
CN 1105152	B	20030409	CN 1998-806666		19980624
US 6344076	B1	20020205	US 1999-446972		19991230
PRIORITY APPLN. INFO.:			GB 1997-14010	A	19970703
			GB 1997-23007	A	19971101
			WO 1998-GB1853	W	19980624

OTHER SOURCE(S): MARPAT 130:111502
GI



I

AB Monoazo dyes having general structure I [A = N, CCl, CCN, CNO2; L1 = OR3; Z = O, S, NR2; R1, R2 = H, (substituted) alkyl; R3 = H, alkyl; W = CO2Q, SO3Q; X = (substituted) amino group, (substituted) amino group-contg. group; Y = substituent other than W and X; Q = (substituted) ammonium; m, n, p = 0-3; m + n + p = 0-5] are synthesized and used in jet-printing inks. Inks contg. the monoazo dyes, an ink-jet printing process using the inks, and cartridges and a substrate printed with the inks are also claimed.

IT **7558-79-4**, Phosphoric acid, disodium salt
RL: TEM (Technical or engineered material use); USES (Uses)
(jet-printing inks contg. monoazo dyes)

IT **219636-33-6P**
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(monoazo dyes and jet-printing inks contg. them)

IT **219636-34-7P 219636-35-8P**
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of monoazo dyes for jet-printing inks)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L36 ANSWER 6 OF 26 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1998:619019 HCAPLUS
DOCUMENT NUMBER: 129:218065
TITLE: Ink jet ink dyes based on ammonium containing cationic dyes having improved color migration and fading properties and dye manufacture
INVENTOR(S): Feeman, James Frederic; Sun, Jing Xiao
PATENT ASSIGNEE(S): Lexmark International Inc, USA
SOURCE: Brit. UK Pat. Appl., 48 pp.
CODEN: BAXXDU
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 2315493	A1	19980204	GB 1997-14797	19970714
GB 2315493	B2	20010103		
GB 2346618	A1	20000816	GB 2000-10797	19970714
GB 2346618	B2	20010207		
US 5969112	A	19991019	US 1998-55007	19980403
US 5998590	A	19991207	US 1998-54606	19980403
US 6130319	A	20001010	US 1998-55008	19980403

PRIORITY APPLN. INFO.: US 1996-690467 A 19960724
GB 1997-14797 A3 19970714

OTHER SOURCE(S): MARPAT 129:218065

AB Phthalocyanine and azo dye derivs. modified with cationic groups are useful in jet inks. Thus, 0.01125 mol C.I. Reactive Red 180 was heated with 0.01125 mol diethanolamine at 50.degree. at pH 7.5 for 18 h and treated with di-Me sulfate to give the cationic dye, which was added (2%), with 2,2-thiodiethanol 15, 1,2-hexanediol 6, Proxel GXL 0.1%, and the balance H2O to give a jet ink for printing images with good lightfastness (72 h, Xenon Arc Fadometer).

IT **204976-41-0P 204976-43-2P 212209-69-3P**
212209-71-7P 212209-73-9P 212209-75-1P
212209-77-3P 212209-79-5P 212209-81-9P
212209-83-1P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(ink jet ink dyes based on ammonium contg. cationic dyes having improved resistance to color migration and lightfastness)

IT **50662-99-2**, C.I. Reactive Yellow 2 **98114-32-0**, C.I. Reactive Red 180
RL: RCT (Reactant); RACT (Reactant or reagent)
(ink jet ink dyes based on ammonium contg. cationic dyes having improved resistance to color migration and lightfastness)

IT **212209-67-1P**
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(ink jet ink dyes based on ammonium contg. cationic dyes having improved resistance to color migration and lightfastness and waterfastness)

L36 ANSWER 7 OF 26 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1998:503148 HCAPLUS
DOCUMENT NUMBER: 129:217900
TITLE: Synthesis and properties of reactive dyes derived from sulforhodamine B
AUTHOR(S): Xu, Yingmei; Wu, Zuwang
CORPORATE SOURCE: State Key Laboratory of Fine Chemicals, Dalian University of Technology, Dalian, Zhongshan, 116012, Peop. Rep. China
SOURCE: Shikizai Kyokaishi (1998), 71(6), 353-361
CODEN: SKYOAO; ISSN: 0010-180X
PUBLISHER: Shikizai Kyokai
DOCUMENT TYPE: Journal
LANGUAGE: Japanese

AB A series of xanthene-type reactive dyes having dichlorotriazine or sulfoethylsulfonyl group was synthesized by chlorosulfonation and amination of Sulforhodamine B (C. I. Acid Red 52). Compared with Sulforhodamine B, absorption spectra for the solns. of the above reactive dyes showed bathochromic shifts, and bluish shades on silk fiber were obsd. The exhaustion and reaction ratios on silk were more than 88% and washing fastness was 4-5 grade. The structures of aminosulfo derivs. of Rhodamine were characterized by NMR and IR spectra and elemental anal.

IT **3520-42-1**, Sulforhodamine B

RL: RCT (Reactant); RACT (Reactant or reagent)
(starting material; synthesis and properties of reactive dyes derived from sulforhodamine B)

IT **212319-76-1P 212395-73-8P**
RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(synthesis and properties of reactive dyes derived from sulforhodamine B)

L36 ANSWER 8 OF 26 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1998:220856 HCAPLUS
DOCUMENT NUMBER: 128:271816
TITLE: Ink system with reduced bleed
INVENTOR(S): Feeman, James F.; Holloway, Ann P.; Zimmer, Agnes K.; Sun, Jing X.; Franey, Terence E.; Mrvos, James M.; Beach, Bradley L.
PATENT ASSIGNEE(S): Lexmark International, Inc., USA
SOURCE: U.S., 24 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5735941	A	19980407	US 1996-690468	19960724
GB 2315759	A1	19980211	GB 1997-15666	19970724
GB 2315759	B2	20000705		

PRIORITY APPLN. INFO.: US 1996-690468 A 19960724
OTHER SOURCE(S): MARPAT 128:271816
AB An ink system comprising a first ink contg. a flocculating dye in an aq. soln. and a second ink contg. a dispersant-pigment complex in an aq. soln. reduces bleed between the two inks when they are applied side by side, wherein the flocculating dye flocculates the dispersant-pigment complex. A first ink comprised Basic Yellow 45, 2,2'-thiodiethanol, 1,2-hexanediol, Proxel GXL, and deionized water, and a second ink comprised carbon black, methacrylic acid-monomethacryloyloxypropyl-terminated di-Me siloxane-stearyl methacrylate terpolymer, and deionized water.

IT **204976-23-8P 204976-25-0P 204976-27-2P**
204976-29-4P 204976-31-8P 204976-33-0P
204976-35-2P 204976-37-4P 204976-39-6P
204976-41-0P 204976-43-2P 204976-45-4P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(ink system with reduced bleed)

IT **50662-99-2**, C.I. Reactive Yellow 2 **98114-32-0**, C.I. Reactive Red 180
RL: RCT (Reactant); RACT (Reactant or reagent)
(ink system with reduced bleed)

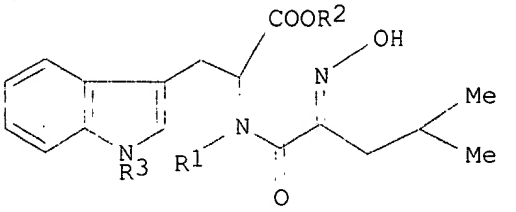
REFERENCE COUNT: 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L36 ANSWER 9 OF 26 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1995:846613 HCAPLUS
DOCUMENT NUMBER: 123:256434
TITLE: Preparation of NF 1616-904 and related compounds
INVENTOR(S): Matoba, Katsuhide; Tone, Hitoshi; Goto, Fumitaka; Niihama, Koichi; Saka, Masayuki; Abe, Kaoru; Namikawa, Junichi; Tanaka, Tatsuyoshi; Nishi, Takao
PATENT ASSIGNEE(S): Otsuka Pharma Co Ltd, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 31 pp.
CODEN: JKXXAF

DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07157481	A2	19950620	JP 1993-305561	19931206
JP 2742979	B2	19980422		

PRIORITY APPLN. INFO.: JP 1993-305561 19931206
OTHER SOURCE(S): CASREACT 123:256434; MARPAT 123:256434
GI



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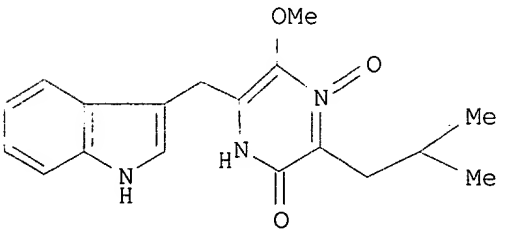

II

AB Indole derivs. I [R1 = cyanoalkyl, substituted phenylsulfonyl, etc.; R2 = H, alkyl, substituted phenylalkyl, etc.; R3 = H, alkoxycarbonyl, benzoyl, etc.] are cyclized, the products are O-methylated and then deprotected to give higher yields of the title compd. II. II-related compds. are also prepd. Thus, L-tryptophan Me ester hydrochloride in benzene contg. 4-MeC6H4SO3H was refluxed with 4-(dimethylamino)benzaldehyde for 4 h to give N-[(4-dimethylamino)benzyl]-L-tryptophan Me ester, which in DMF contg. K2CO3 was treated with 2-(2-cyanoethyoximino)isocaproyl chloride at room temp. overnight to give N-[2-(2-cyanoethyoximino)isocaproyl]-N-[(4-dimethylamino)benzyl]-L-tryptophan Me ester, which in DMF was treated with K2CO3 in H2O to give N-[4-(dimethylamino)benzyl]-N-(2-hydroxyiminoisocaproyl)-L-tryptophan, which was cyclized in the presence of dicyclohexylcarbodiminde and the product then hydrogenolyzed to give II.

IT **930-69-8 39689-37-7 168766-77-6**
168766-87-8
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of NF 1616-904 and related compds.)

IT **168766-76-5P 168766-78-7P 168766-91-4P**
168766-92-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of NF 1616-904 and related compds.)

L36 ANSWER 10 OF 26 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1994:655452 HCAPLUS
DOCUMENT NUMBER: 121:255452
TITLE: .beta.-Tosylethylamine: A Useful Reagent for

Preparation of N-Protected Amides, Carbamates, and Related Compounds. Application to Synthesis of .beta.-Lactams
AUTHOR(S): DiPietro, Darren; Borzilleri, Robert M.; Weinreb, Steven M.
CORPORATE SOURCE: Department of Chemistry, Pennsylvania State University, University Park, PA, 16802, USA
SOURCE: Journal of Organic Chemistry (1994), 59(20), 5856-7
CODEN: JOCEAH; ISSN: 0022-3263
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 121:255452
AB Readily prepd. .beta.-tosylethylamine can be used to synthesize N-tosylethyl (TSE)-protected amido compds. and .beta.-lactams, which can be deprotected under mild conditions with **potassium** tert-butoxide.
IT **158612-51-2P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and deprotection of tosylethyl-protected amides)

L36 ANSWER 11 OF 26 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1994:485703 HCAPLUS
DOCUMENT NUMBER: 121:85703
TITLE: Silane-containing reactive dyes, their preparation and use
INVENTOR(S): Schrell, Andreas; Russ, Werner Hubert; Riehm, Thomas
PATENT ASSIGNEE(S): Hoechst A.-G., Germany
SOURCE: Eur. Pat. Appl., 37 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 575744	A1	19931229	EP 1993-108001	19930517
R: BE, CH, DE, FR, GB, IT, LI, NL				
JP 06065518	A2	19940308	JP 1993-120106	19930521

PRIORITY APPLN. INFO.: DE 1992-4217035 19920522
OTHER SOURCE(S): MARPAT 121:85703
AB The dyes, contg. .beta.-aminoethylsulfonyl or 6-aminotriazinylamino groups with the amino groups linked to alkoxy and(or) hydroxy group-contg. silyl substituents, are obtained for application to fibrous substrates with fixation at >95.degree.. Thus, 2,1,5-H2NC10H5(SO3H)2 .fwdarw. 3-methyl-1-[4-(2-sulfatoethylsulfonyl)phenyl]-5-pyrazolone was condensed with H2NCH2CH2NH(CH2)3Si(OMe)3 to give a fast yellow dye for cotton.
IT **155687-25-5P 156735-23-8P**
RL: IMF (Industrial manufacture); PREP (Preparation)
(prepn. of, as blue dye for cotton)
IT **155687-26-6P**
RL: IMF (Industrial manufacture); PREP (Preparation)
(prepn. of, as yellow dye for cotton)
IT **20298-05-9**
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with [[(aminoethyl)amino]propyl]trimethoxysilane)

L36 ANSWER 12 OF 26 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1990:631187 HCAPLUS
DOCUMENT NUMBER: 113:231187
TITLE: DNA-directed alkylating agents. 3. Structure-activity relationships for acridine-linked

aniline mustards: consequences of varying the length of the linker chain

AUTHOR(S): Valu, Kisione K.; Gourdie, Trudi A.; Boritzki, Theodore J.; Gravatt, G. Lance; Baguley, Bruce C.; Wilson, William R.; Wakelin, Laurence P. G.; Woodgate, Paul D.; Denny, William A.

CORPORATE SOURCE: Sch. Med., Univ. Auckland, Auckland, N. Z.

SOURCE: Journal of Medicinal Chemistry (1990), 33(11), 3014-19
CODEN: JMCMAR; ISSN: 0022-2623

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 113:231187

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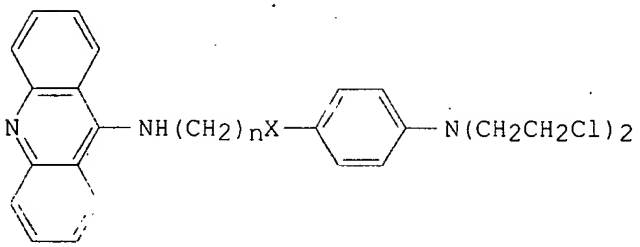

I

AB Four series of acridine-linked aniline mustards I (X = CH2, O, S, SO2; n = 2-4) have been prepd. and evaluated for in vitro cytotoxicity, in vivo antitumor activity and DNA crosslinking ability. Relationships were sought between chain length and biol. properties. Within each series, increasing chain length did not alter the reactivity of the alkylating moiety but did position it differently on the DNA, since crosslinking ability altered with chain length, being maximal with the C4 analog. The in vivo antitumor activities of the compds. depended to some extend on the reactivity of the mustard, with the least reactive SO2 compds. being inactive. However, DNA-targeting did allow the use of less reactive mustards, since the S-linked acridine mustards showed significant activity whereas the parent S-mustard did not. Within each active series, the most active compd. was the C4 homologue, suggesting some relationship between activity and extent of DNA alkylation.

IT **130199-05-2P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and substitution reaction of, with methoxyacridine)

IT **130198-68-4P 130199-16-5P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn., cytotoxicity, antitumor activity, and DNA crosslinking by)

IT **13113-79-6, Sodium** 4-nitrothiophenolate
RL: RCT (Reactant); RACT (Reactant or reagent)
(substitution by, of carbobenzyloxy chloride)

L36 ANSWER 13 OF 26 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1990:120601 HCAPLUS

DOCUMENT NUMBER: 112:120601

TITLE: Water-soluble, monoazo dyes containing a ureido group and two sulfonyl fiber-reactive groups

INVENTOR(S): Thompson, Glenn A.; Corso, Anthony J.; Steuernagel, Hans H.

PATENT ASSIGNEE(S): Crall, Hugh C., USA; Hoechst Celanese Corp.

SOURCE: U.S., 14 pp.

CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4855411	A	19890808	US 1988-170585	19880317

PRIORITY APPLN. INFO.: US 1988-170585 19880317
OTHER SOURCE(S): CASREACT 112:120601; MARPAT 112:120601
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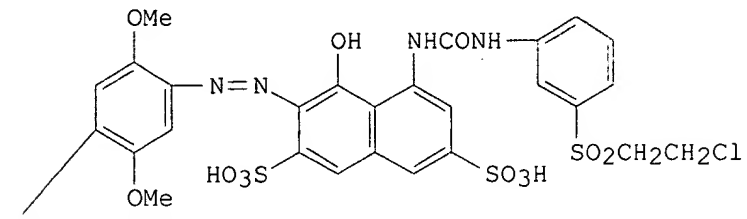


I

AB The title dyes XSO2AN:NQN(R)CONHZSO2Y [A, Q = (un)substituted phenylene or (un)substituted naphthalene residues; R = H, C1-4 alkyl, sulfonated lower alkyl; X, Y = CH:CH2, CH2CH2SSO3H, CH2CH2Br, CH2CH2OAc, CH2CH2OH7 CH2CH2OPO3H2, CH2CH2OSO2Me, CH2CH2OPh, CH2CH2OSO3H, CH2CH2Cl, CH2CH2OSO2Ph, CH2CH2N(R1)R2; R1, R2 = R; Z = (un)substituted Ph], which dye cellulosic fabrics in fast shades, are prepd. Thus, 1-amino-8-hydroxy-3,6-naphthalenedisulfonic acid mono Na salt was condensed with 3-(.beta.-chloroethylsulfonyl)phenyl-1-isocyanate, and the intermediate coupled with diazotized 1-amino-2,5-dimethoxyphenyl-4-(.beta.-sulfatoethylsulfone), producing I, which dyed cotton a fast violet shade. A soln. of I showed no chem. or phys. changes after 10 mo storage at pH .apprx.4.5.

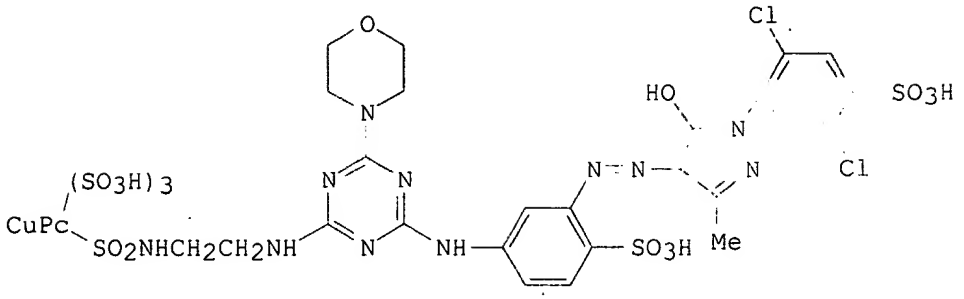
IT **5460-09-3 40492-14-6**
RL: USES (Uses)
(condensation of, with (chloroethylsulfonyl)phenylisocyanate)

IT **125679-24-5P**
RL: PREP (Preparation)
(manuf. of, as reactive dye)

L36 ANSWER 14 OF 26 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1986:592866 HCAPLUS
DOCUMENT NUMBER: 105:192866
TITLE: Water-soluble phthalocyanine compounds
INVENTOR(S): Yamamura, Shigeo; Hirasawa, Yutaka
PATENT ASSIGNEE(S): Nippon Kayaku Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 28 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 61087759	A2	19860506	JP 1984-185451	19840906

JP 04011672 B4 19920302
PRIORITY APPLN. INFO.: JP 1984-185451 19840906
GI



I

AB Water-sol. phthalocyanine (Pc) compds. useful for coloring glass were prepd. Thus, cyanuric chloride was condensed with 2,4-diaminobenzenesulfonic acid, diazotized, coupled with 1-(2,5-dichloro-4-sulfophenyl)-3-methyl-5-pyrazolone, and condensed with CuPc(SO3H)3SO2NHCH2CH2NH2 and then morpholine to give I. Toluene 69, 2-(dimethylamino)ethyl methacrylate 30, and AIBN 1 part were heated at 80.degree. for 5 h, and 50 parts of the resulting polymer soln. was treated with 15 parts (chloromethyl)styrene for 16 h, dissolved in 260 parts 2-ethoxyethanol, treated with 16 parts Irgacure 651, spin-coated 1 .mu. thick on a KBM 503-coated glass plate, and UV-cured. The coated glass was immersed in a 0.05% aq. I at pH 4 for 20 min to give a bright green optical glass.

IT **7429-90-5D**, phthalocyanine complexes **104359-64-0D**, **aluminum** complexes **104972-65-8 104972-69-2** **104994-15-2 104994-16-3 104994-17-4** **104994-18-5 105015-17-6 105015-18-7** **105038-61-7 105038-63-9 105038-64-0**
RL: TEM (Technical or engineered material use); USES (Uses)
(dyes, for colored coatings for optical glass, manuf. of)

L36 ANSWER 15 OF 26 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1984:419748 HCAPLUS
DOCUMENT NUMBER: 101:19748
TITLE: Immobilized polynucleotide phosphorylase. III. Formation of the enzyme-polynucleotide complex
AUTHOR(S): Liu, Nianjuan; Zhang, Yuying; Yang, Kaiyu
CORPORATE SOURCE: Inst. Microbiol., Acad. Sin., Beijing, Peop. Rep. China
SOURCE: Weishengwu Xuebao (1983), 24(1), 50-7
CODEN: WSHPA8; ISSN: 0001-6209
DOCUMENT TYPE: Journal
LANGUAGE: Chinese

AB The polynucleotide synthesized by immobilized polynucleotide phosphorylase (PNPase) was bound with the enzyme during polymn., forming an enzyme-polynucleotide complex. The use of immobilized enzyme facilitates the isolation of the complex with the easy sepn. of immobilized enzyme from the reaction mixt. Anal. of polymn. products showed no intermediate oligonucleotides; only remaining substrates and polymers with a high mol. wt. were detected. Apparently, the polymn. process catalyzed by immobilized PNPase involves a processive mechanism. When immobilized PNPase was incubated with substrate (ADP, CDP, or IDP) at optimum pH 8-9

for a long time without addn. of divalent cations, polymn. did occur, and the synthesized polynucleotides were also bound with the enzyme mols. Under identical conditions no polymn. was detected with native PNPase. This difference might be due to either the presence of small amts. of divalent cation on the carrier of ABSE-agarose or an unusual property caused by immobilization. The presence of substrate (without addn. of Mg2+) remarkably enhanced the stability of immobilized enzyme. The immobilized PNPase was used >680 times. In addn. to the immobilization, the superior operation stability of immobilized PNPase is due to the substrate and polynucleotide protection. Divalent cation (Mg2+) and pH 8-9 also exhibited good effects on the stability of enzyme. Among all these factors, the polynucleotide bound with the enzyme during polymn. greatly contributed to the stability of immobilized PNPase. Probably, the ABSE-agarose carrier-enzyme-polynucleotide ternary complex provides the best conformation for the stability of the enzyme.

IT **7439-95-4**, biological studies
RL: BIOL (Biological study)
(polynucleotide phosphorylase immobilized deriv. stabilization by)

IT **80111-44-0**
RL: BIOL (Biological study)
(polynucleotide phosphorylase immobilized on, stabilization of, by polynucleotides and other compds.)

L36 ANSWER 16 OF 26 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1984:53022 HCAPLUS
DOCUMENT NUMBER: 100:53022
TITLE: Physicochemical properties of fiber-reactive dyes for wool
AUTHOR(S): Stepanenko, V. O.; Romanova, M. G.
CORPORATE SOURCE: USSR
SOURCE: Khimicheskaya Promyshlennost (Moscow, Russian Federation) (1983), (11), 655-7
CODEN: KPRMAW; ISSN: 0023-110X
DOCUMENT TYPE: Journal
LANGUAGE: Russian

AB The covalent bonding of reactive dyes on wool increased from 71 to 89%, and the rate of unreacted dye trapping decreased from 7300-9400 to 2000/s, as the diffusion coeff. of the dyes increased from 1.7 .times. 1010 to 2.8 .times. 1010 cm2/s, depending on the hydrolytic stability of the reactive groups. The wet fastness of colors was adequate when covalent bonding was .gtoreq.75%, corresponding to a diffusion coeff. of .gtoreq.2 .times. 1010 cm2/s.

IT **4499-01-8 17804-49-8 70210-40-1**
70224-86-1 70616-90-9 80419-51-8
86126-59-2 88640-53-3 88640-54-4
88640-55-5 88640-56-6 88640-57-7
88640-58-8 88640-59-9 88646-66-6
88646-67-7 88646-68-8
RL: USES (Uses)
(fixation of, on wool, color fastness and diffusion in relation to)

L36 ANSWER 17 OF 26 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1981:104676 HCAPLUS
DOCUMENT NUMBER: 94:104676
TITLE: Sulfur-containing diisocyanates and their use in preparing polyurethanes
INVENTOR(S): Schwindt, Juergen; Groegler, Gerhard; Ganster, Otto; Koster, Johannes
PATENT ASSIGNEE(S): Bayer A.-G., Fed. Rep. Ger.
SOURCE: Ger. Offen., 48 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2916135	A1	19801030	DE 1979-2916135	19790420
CA 1130304	A1	19820824	CA 1980-348518	19800326
US 4387057	A	19830607	US 1980-136624	19800402
EP 17883	A1	19801029	EP 1980-101845	19800405
EP 17883	B1	19811021		
R: AT, BE, CH, DE, FR, GB, IT, NL, SE				
AT 322	E	19811115	AT 1980-101845	19800405
AU 8057604	A1	19801023	AU 1980-57604	19800418
AU 532064	B2	19830915		
ES 490705	A1	19810416	ES 1980-490705	19800418
JP 56043259	A2	19810421	JP 1980-50545	19800418
ZA 8002321	A	19810930	ZA 1980-2321	19800418

PRIORITY APPLN. INFO.: DE 1979-2916135 19790420
EP 1980-101845 19800405

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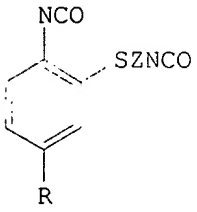

I

AB The title isocyanates I (R = H, Br, Cl, alkylsulfonyl, alkoxy, or alkylthio, Z = C2 or higher alkylene or substituted or unsubstituted p-phenylene) are prepd. and used in the manuf. of rapid-curing urethane elastomers. Thus, 2,4'-diaminodiphenyl sulfide [6259-01-4] was prepd. by coupling Na o-aminothiophenoxide [**52380-58-2**] with 4-nitrochlorobenzene [100-00-5] and hydrogenating, and was phosgenated to give 2,4'-diisocyanatodiphenyl sulfide (I, R = H, Z = p-phenylene)(II) [75790-87-3]. A mixt. of 100 parts polypropylene glycol-polyoxypropylene triol prepolymer with NCO content 3.55% and 31.63 parts II was combined at 60.degree. with 10.82 parts 2-ethylhexyl 3,5-diamino-4-methylbenzoate, giving a compn. which remained castable for 1.5 min at 70.degree.. The compn. was poured into a mold preheated to 110.degree., could be removed after 1 min, and reached an acceptable strength level after 2 min. A control prepd. using 2,4-TDI instead of II required 3.5 min before removing and reached acceptable strength only after 7 min. Other phys. properties were comparable.

IT **76806-18-3P**
RL: PREP (Preparation)
(manuf. of, for rapid-curing urethane elastomer synthesis)

IT **6976-04-1 52380-58-2**
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with nitrochlorohydrocarbons)

L36 ANSWER 18 OF 26 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1980:111156 HCAPLUS
DOCUMENT NUMBER: 92:111156
TITLE: N-Substituted triorganostannylhydrocarbylcarboxylic acid hydrazides
INVENTOR(S): Mao, Chung-Ling; Strunk, Richard J.; Hubbard, Winchester L.
PATENT ASSIGNEE(S): Uniroyal, Inc., USA

SOURCE: U.S., 18 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4178382	A	19791211	US 1978-917143	19780619
CA 1106362	A1	19810804	CA 1978-311093	19780912
ZA 7902472	A	19800625	ZA 1979-2472	19790521
EP 6693	A1	19800109	EP 1979-301051	19790604
R: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE				
BR 7903813	A	19800205	BR 1979-3813	19790615
IL 57578	A1	19821130	IL 1979-57578	19790617
JP 55002687	A2	19800110	JP 1979-76654	19790618
DD 144354	C	19801015	DD 1979-213695	19790618
ES 481677	A1	19800616	ES 1979-481677	19790619
AU 7948204	A1	19800103	AU 1979-48204	19790620

PRIORITY APPLN. INFO.: US 1978-917143 19780619

AB Approx. 150 R3SnXCONR1R2 (I, X = C1-5 alkylene, C8 aralkylene, R = C1-4 alkyl, C3-6 cycloalkyl, C6-10 aryl; R1 = H, C1-12 alkyl, C7-9 aralkyl, C2-12 alkanoyl, C7-11 aroyl, C1-12 substituted alkyl; R2 = NR3R4, N:CR5R6, NR7COR8, NR9CYNR10R11; Y = O, S; R - R11 = H, substituted alkyl, cycloalkyl, aryl, etc.) were prepd., e.g., by the reaction of R3SnXCONHNH2 with R5R6CO. Thus, 0.016 mol Me3SnCH2CH2CONHNH2 and 0.068 mol Me2CO gave 3.8g Me3SnCH2CH2CONHN:CMe2 (II). I were pesticides. Thus, II at 1000 ppm gave 100% kill of aphids, at 500 ppm 100% kill of mites, and at 1000 ppm gave 80% kill of the cotton boll weevil.

IT **72958-46-4P 72958-77-1P 72959-14-9P**
RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. and pesticidal activity of)

L36 ANSWER 19 OF 26 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1973:85938 HCAPLUS
DOCUMENT NUMBER: 78:85938
TITLE: Aromatic amine dye intermediates
INVENTOR(S): Yamaya, Wataru; Inoue, Shozo
PATENT ASSIGNEE(S): Mitsubishi Chemical Industries Co., Ltd.
SOURCE: Jpn. Tokkyo Koho, 5 pp.
CODEN: JAXXAD
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 47037413	B4	19720920	JP 1966-29344	19631209

AB Arom. amines contg. a sulfonyl group were prepd. Thus, a mixt. of p-AcNHC6H4SO2Na and PhNMeCH2CH2Cl was refluxed in EtOH to give sulfone intermediate I(X = p-AcNH, n = O) [**37710-59-1**]. In another example, sulfonamide intermediate I(X = AcNH, n = 1, R = H) [37710-60-4] was prepd. from PhNEtCH2CH2NH2 and p-AcNHC6H4SO2Cl. Also prepd. were I (X = p-AcNH, n = 1, R = Me) and I [X = 2,5-Me(O2N), n = 1, R = Me].

IT **37710-59-1P**
RL: IMF (Industrial manufacture); PREP (Preparation)
(prepn. of)

IT **6034-54-4**
RL: USES (Uses)

(reaction with (chloroethyl)ethylphenylamine)

L36 ANSWER 20 OF 26 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1973:83960 HCAPLUS
DOCUMENT NUMBER: 78:83960
TITLE: p-Isothiocyanatophenyl 2-substituted-ethyl sulfides and sulfones
AUTHOR(S): Uher, M.; Jendrichovsky, J.
CORPORATE SOURCE: Slov. Vys. Sk. Tech., Bratislava, Czech.
SOURCE: Collection of Czechoslovak Chemical Communications (1973), 38(1), 289-93
CODEN: CCCCAK; ISSN: 0010-0765
DOCUMENT TYPE: Journal
LANGUAGE: German
AB p-SCNC6H4SCH2CH2R (R = OH, Cl, iodo, -NCS, NEt2) and p-(SCN)C6H4SO2CH2CH2R (R = OH, Cl, Br, iodo, NEt2, -NCS, -SCN) were prepd. by treating the corresponding p-substituted anilines or aniline hydrochlorides with C(S)Cl2; their ir and uv spectra were discussed. p-AcNHC6H4SO2Cl in EtOH treated with Zn amalgam (prepd. from Zn and HgCl2) and concd. HCl gave p-AcNHC6H4SH. A mixt. of p-AcNHC6H4SCH2CH2O3SC6H4Me-p, Me2CO, and NaI was refluxed 3 hr to give p-AcNHC6H4SCH2CH2I.
IT **1021-56-3P 40330-87-8P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

L36 ANSWER 21 OF 26 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1973:5402 HCAPLUS
DOCUMENT NUMBER: 78:5402
TITLE: Fiber-reactive azo and anthraquinone dyes
INVENTOR(S): Berner, Klaus; Hoyer, Ernst; Sommer, Karl
PATENT ASSIGNEE(S): Farbwerke Hoechst A.-G.
SOURCE: Ger. Offen., 58 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2106648	A	19720824	DE 1971-2106648	19710212
DE 2106648	B2	19791011		
DE 2106648	C3	19800626		

PRIORITY APPLN. INFO.: DE 1971-2106648 19710212
AB Fifteen water-sol. dyes, R[SO2CH2CH2N(CH2CH2OSO3M)2]n (n = 1 or 2; M = H, K, or Na, R = azo or anthraquinone dye residue free of water-solubilizing groups), were prepd. starting from H2NQSO2CH:CH2 (Q = arylene) and used for dyeing and printing, e.g. silk, wool, polyamide, and cotton-polyester. Thus, a mixt. of 4,2,5-H2N(MeO)2C6H2SO2CH:CH2 and (HOCH2CH2)2NH was heated 3 hr at 100.deg., the mixt. dissolved in pyridine, H2NSO3H added, the mixt. heated 30 min at 100-5.deg., diazotized, coupled with 3-methyl-1-phenyl-5-pyrazolone, and salted to give fiber-reactive dye I [**37114-73-1**], dyeing wool a level, wetfast yellow shade.
IT **37114-73-1P 40082-31-3P 40082-36-8P**
40082-39-1P 40082-41-5P 40082-43-7P
40082-46-0P 40082-48-2P 40082-49-3P
40082-52-8P 40082-54-0P 40082-82-4P
40144-28-3P 40144-30-7P
RL: IMF (Industrial manufacture); PREP (Preparation)
(prepn. of)

L36 ANSWER 22 OF 26 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1971:100614 HCAPLUS

DOCUMENT NUMBER: 74:100614
TITLE: 1-(Alkylsulfonylphenyl)-5-phenyl-3-styryl-2-pyrazolines as fluorescent whitening agents
INVENTOR(S): Mengler, Helmut; Roesch, Guenter; Schinzel, Erich; Smerz, Otto
PATENT ASSIGNEE(S): Farbwerke Hoechst A.-G.
SOURCE: Ger. Offen., 25 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 1923702	A	19701119	DE 1969-1923702	19690509

PRIORITY APPLN. INFO.: DE 1969-1923702 19690509
GI For diagram(s), see printed CA Issue.
AB The title compds. (I, R1 = CH2CH2X, X = SO3Na, OR3, NHR4, or NR52) were prepd. from (4-RC6H4CH:CH)2CO (II) and p-H2NNHC6H4SO2CH2CH2OH (III) via I (R1 = CH2CH2OH), dehydration to I (R1 = CH:-CH2), and addn. of active H compds. Mixts. of I and IV, used as fluorescent whitening agents for polyamide, polyacrylonitrile, and cellulose textiles, were more effective than the single compds. Thus, refluxing II (R = H) with III in EtOH and HCl gave 90% I (R = H, R1 = CH2CH2OH), which on reaction with H2SO4 and KCl gave I (R = H, R1 = CH2CH2OSO3K) which in aq. Me2CO was treated with NaOH to give I (R = H, R1 = CH:CH2) (V). I (R = H, R1 = CH2CH2OCHMeCH2NMe2) was prepd. from V by adding HOCHMeCH2NMe2. Similarly were prepd. 8 other I (R = H) and 9 I (R = Cl).
IT **29244-86-8P 29244-96-0P 29244-97-1P**
RL: IMF (Industrial manufacture); PREP (Preparation)
(prepn. of)

L36 ANSWER 23 OF 26 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1970:478560 HCAPLUS
DOCUMENT NUMBER: 73:78560
TITLE: Styrylpyrazolines as fluorescent whitening agents
PATENT ASSIGNEE(S): Farbwerke Hoechst A.-G.
SOURCE: Fr. Demande, 18 pp.
CODEN: FRXXBL
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2006587	A5	19691226	FR 1969-12412	19690421

PRIORITY APPLN. INFO.: CH 1968-5801 A 19680419
GI For diagram(s), see printed CA Issue.
AB The title compds. (I) are prepd. by condensing (4-RC6H4CH:CH)2CO (II) with 4-H2NNHC6H4SO2CH2CH2OH (III), transforming the products to the -SO2CH2CH2OSO3H and (or) SO2CH:CH2 derivs. and reacting with R'H (alcs., amines, amides). I are used on polyamide, cellulose, and polyacrylonitrile fabrics. Thus, II (R = H) was condensed with III in acid soln. to give I (R = H, R1 = OH), which was sulfated, converted to the vinyl sulfone, and treated with Na2SO3 to give I (R = H, R' = SO3Na). Similarly 21 other I were prepd.
IT **29244-86-8P 29244-96-0P 29244-97-1P**
RL: IMF (Industrial manufacture); PREP (Preparation)
(prepn. of)

L36 ANSWER 24 OF 26 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1966:429899 HCAPLUS
DOCUMENT NUMBER: 65:29899
ORIGINAL REFERENCE NO.: 65:5563h,5564a-g
TITLE: Metallized azo dyes
PATENT ASSIGNEE(S): Farbwerke Hoechst A.-G
SOURCE: 39 pp.
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
NL 65012362		19660325	NL	
PRIORITY APPLN. INFO.:			DE	19640924

AB The prepn. is described of azo dyes contg. XCH2CH2SO2C6H4NHCONH groups, where X = Cl, Ac, OSO3H, and S2O3H. 1,8,3,6-HO(H2N)C10H4(SO3H)2 (II) (223 parts) in 700 vols. H2O neutralized with Na2CO3, and treated at 0-5.degree. and pH 6.5-7 during 1 hr. with stirring with 206.5 parts m-ClCH2CH2SO2C6H4NCO (III) (m. 81.degree.) in 415 parts Me2CO yielded 1,8,3,6-HO(m-ClCH2CH2SO2C6H4NHCONH)C10H4(SO3H)2 (IV). IV (56.5 parts) in 1000 parts H2O coupled with 9.3 parts diazotized PhNH2 (V) yielded V .fwdarw. IV, dark red, H2O-sol. powder which dyes wool and polyamide fibers from an acid bath red shades of good light- and washfastness. 1,8,4,6-H2N(HO)C10H4(SO3H)2 (15.95 parts) treated with 12.5 parts powd. p-CH2:CHSO2C6H4NCO (VI) (m. 61.degree.) and diazotized 8.65 parts p-HO3SC6H4NH2 (VII) yielded VII .fwdarw. 1,8,3,5-HO(p-CH2:CHSO2C6H4NHCONH)C10H4(SO3H)2, a red powder, bright red on cotton. Similarly, 16.0 parts II, 19 parts o-ClCH2CH2SO2C6H4NCO (VIII), and diazotized 4.66 parts V yielded V .fwdarw. 1,8,3,6-HO(o-ClCH2CH2SO2C6H4NHCONH)C10H4(SO3H)2, a dark red powder; it dyes bluish red shades. II (16.0 parts) with 15 parts p-isomer of III (m. 100.degree.) and diazotized 6.9 parts o-HO2CC6H4NH2 (IX) yielded the bluish red dye IX .fwdarw. 1,8,3,6-HO(p-ClCH2CH2SO2C6H4NHCONH)C10H4(SO3H)2. II (16.0 parts) condensed with 30 parts p-HO3SOCH2CH2C6H4NHCO2Ph, and the resulting 1,8,3,6-HO(p-HO3SOCH2CH2C6H4NHCONH)C10H4(SO3H)2 (X) coupled with diazotized 11.1 parts 2,1-H2NC10H6SO3H (XI) gave brillant blue XI .fwdarw. X. II condensed with an equiv. amt. of ClCO2Ph at 55-60.degree. and pH 7.0-7.3 and an equiv. amt. of p-HO3SOCH2CH2C6H4NH2 also yielded X. II (16.0 parts) with 13 parts m-CH2: CHSO2C6H4NCO (m. 46.degree.) and 13.2 parts diazotized 4,3-H2N(HO3S)C6H3NHPh (XII) yielded blue XII .fwdarw. 1,8,3,6-HO(m-CH2: CHSO2C6H4NHCONH)C10H4(SO3H)2. II (12.8 parts) treated with 15 parts m-PhOCH2CH2SO2C6H4NCO (m. 87.degree.) and 6.9 parts diazotized p-HO3SC6H4NH2 (XIII) yielded red XIII .fwdarw. 1,8,3,6-HO(m-PhOCH2CH2SO2C6H4NHCONH)C10H4(SO3H)2. 6,1,4,2-Cl(HO)(HO3S)C6H2NH2 (XIV) (11.2 parts) diazotized and coupled with 28 parts IV, and the product metallized at 40.degree. and pH 4.5-5.5 during about 2 hrs. in 500 parts H2O with 12.5 parts CuSO4.5H2O gave the violet Cu complex of XIV .fwdarw. IV (Ni complex, red-violet). II 31.9, VI 26, and diazotized 2,5-HO(O2N)C6H3NH2 (XV) 15.4 parts yielded XV .fwdarw. 1,8,3,6-HO(p-CH2:CHSO2C6H4NHCONH)C10H4(SO3H)2 which with 25.0 parts KCr(SO4)2.12H2O gave the blue-gray Cr complex. 1,8,6-H2N(HO)C10H5SO3H 11.96, III 15, and diazotized 3,5,7,1-(HO3S)3C10H4NH2 (XVI) 19 parts yielded red-violet XVI .fwdarw. 1,8,3-HO(m-ClCH2CH2SO2C6H4NHCONH)C10H5SO3H . 1,8,3-H2N(HO)C10H5SO3H 11.96, III 20, and diazotized 4,8,2(HO2S)2C10H5NH2 (XVII) 15.1 parts yielded bluish brown XVII .fwdarw. 1,8,7-HO(m-ClCH2CH2SO2C6H4NHCONH)C10H5SO3H. 2,5-(HO3S)2C6H3NH2 (25.3 parts) diazotized and coupled with 13.7 parts 3,4-H2N(MeO)C6H3Me, and the resulting 2,6,4-Me(MeO)-[2,5-(HO3S)2C6H3N:N]C6H2NH2 (XVIII) diazotized and coupled with 56.5 parts III gave navy-blue XVIII .fwdarw. IV. m-HO3SC6H4NH2 .fwdarw. IV (37.5 parts) with 22.5 parts CuSO4.H2O and 11.3 parts 35% H2O2 gave the red-violet Cu complex. p-HO3SC6H4NH2 diazotized and coupled with II, and the product condensed with III yielded bluish red

p-HO3SC6H4NH2 .fwdarw. IV. 1,8,3,6-HO(EtNH)C10H4(SO3H)2 34.7, III 40, and diazotized V 9.3 parts yielded bright red V .fwdarw. 1,8,3,6-HO(m-ClCH2CH2SO2C6H4NHCONEt)C10H4(SO3H)2. 2,5-HO(HO3S)C6H3NH2 (XIX) (18.9 parts) diazotized and coupled with 31.9 parts II, the resulting XIX .fwdarw. II metallized with CoSO4.6H2O, and the resulting Co complex condensed with 30 parts III yielded the navy-blue Co complex of XIX .fwdarw. IV. 1,8,3,6-HO(p-CH2:CHSO2C6H4NHCONH)C10H4(SO3H)2 (XX) (52.9 parts) coupled with 9.3 parts diazotized V yielded red V .fwdarw. XX. XX coupled with diazotized VII gave similarly red VII .fwdarw. XX. IV from 319 parts II and 296 parts III coupled with 303 parts diazotized 1,5,2-(HO3S)2C10H5NH2 (XXI) gave brilliant bluish red XXI .fwdarw.IV. A similar dye was obtained using 335 parts m-AcOCH2CH2SO2C6H4NCO (XXII) instead of III. A similar run with 6,8,2-(HO3S)2C10H5NH2 (XXIII) gave bluish red XXIII .fwdarw. IV. XXIII .fwdarw. IV 44 with CuSO4.5H2O 22.5, and 35% H2O2 11.3 parts gave the blue Cu complex. II (319 parts) condensed with 335 parts XXII, and the product coupled with 93 parts diazotized V yielded brilliant red V .fwdarw. 1,8,3,6-HO(m-AcOCH2CH2SO2C6H4NHCONH)C10H4(SO3H)2. X coupled with diazotized XXI gave bluish red XXI .fwdarw. X. IV from 159.5 parts II and 148 parts III treated in H2O with 121 parts 33% aq. NaOH at 10-15.degree. and then heated 3 hrs. at 70-5.degree. with 130 parts Na2S2O3.5H2O, and the resulting 1,8,3,6-HO(m-NaO3SSC6H4NHCONH)C10H4(SO3H)2 (XXIII) coupled with diazotized 111.5 parts XI yielded bluish red XI .fwdarw. XXIII. Similarly was prepd. bluish red 1,5,2-(HO3S)2C10H5NH2 .fwdarw. XXIII. 2,4-HO2C(HO3S)C6H3NH2 (XXV) (217 parts) diazotized and coupled with IV from 319 parts II and 296 parts III gave brilliant red XXV .fwdarw. IV (Cu complex, red-violet; Cr complex, blue-violet). 2,5-(HO3S)2C6H3NH2 .fwdarw. 5,2-Me(HO)C6H3NH2 .fwdarw. IV 98, H2O 650, AcONa 30, AcOH 32, and CuSO4.5H2O 43 parts refluxed about 10 hrs. with stirring yielded the blue Cu complex.

IT **6434-50-0**, Benzoic acid, o-[[8-[3-[p-[(2-chloroethyl)sulfonyl]phenyl]ureido]-1-hydroxy-3,6-disulfo-2-naphthyl]azo]-, trisodium salt **6730-50-3**, 2,7-Naphthalenedisulfonic acid, 5-[3-[p-[[2-(diethylamino)ethyl]sulfonyl]phenyl]ureido]-4-hydroxy-3-[(p-sulfophenyl)azo]-
(prepn. of)

L36 ANSWER 25 OF 26 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1966:67255 HCAPLUS
DOCUMENT NUMBER: 64:67255
ORIGINAL REFERENCE NO.: 64:12537b-c
TITLE: Researches on organophosphorus insecticides. VIII. The preparations and chemical reactions of **sodium** salts of O-ethyl N,N-diethylphosphoramido mono (or di)-thioacids
AUTHOR(S): Yang, Shih-Hsien; Chen, Tien-Chih; Wang, Chin-Sun; Chin, Kuei-Yu; Shao, Shu-Lien; Liu, Lun-Tsu
CORPORATE SOURCE: Nankai Univ., Tientsin, Peop. Rep. China
SOURCE: Huaxue Xuebao (1965), 31(5), 406-11
CODEN: HHHPA4; ISSN: 0567-7351
DOCUMENT TYPE: Journal
LANGUAGE: Chinese

AB cf. CA 64, 11240h. The prepns. and chem. properties of the Na salts of O-ethyl N,N-diethylphosphoramido mono(or di)-thioacids (I and II) were reported. I or II reacted with alkyl halides to give the corresponding alkyl esters. By acidifying with dil. HCl, I and II were converted into their corresponding acids, which, on treatment with alkyl iodide in the presence of org. bases, diazomethane, and cyclohexylamine, were transformed into the corresponding alkyl esters, methyl ester, and amide salts, resp. Reaction of II with Br or iodine gave [(EtO)(Et2N)P(S)S]2, which was transformed into (EtO)(Et2N)P(S)Cl by reacting with chlorine.

IT **5755-88-4**, Acetanilide, 4'-[[2-[(2-mercaptoethyl)amino]ethyl]sulfonyl]-, sulfate (ester) **5851-15-0**, Phosphoramidothioic acid,

diethyl-, O-ethyl ester, Na salt **5851-16-1**,
Phosphoramidodithioic acid, diethyl-, O-ethyl ester, Na salt
(prepn. of)

L36 ANSWER 26 OF 26 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1964:10158 HCAPLUS
DOCUMENT NUMBER: 60:10158
ORIGINAL REFERENCE NO.: 60:1870d-h,1871a
TITLE: Water-soluble dyes containing hydroxy alkyl groups
INVENTOR(S): Heslop, Robert N.; Waite, Frederick A.
PATENT ASSIGNEE(S): Imperial Chemical Industries Ltd.
SOURCE: 9 pp.
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 927404		19630529	GB	19591120

AB (Throughout this abstr. Pc represents a phthalocyanine residue.) Azo, anthraquinone, and phthalo cyanine dyes contg. .gtoreq.1 SO3H group and an alkyl group contg. .gtoreq.2 OH groups applied to cellulose in conjunction with HCHO and (or) a resin-forming intermediate and an acid-liberating catalyst yield dyed, crease-resistant fabrics with excellent washfastness. Thus, a soln. of the di-Na salt of 1-amino-4-[3'-(.beta.-sulfatoethylsulfonyl)anilino]anthraquinone-2-sulfonic acid (I) 20 and HOCH2CH(OH)CH2NH2 (II) 26 in H2O 500 parts is stirred 4 hrs. at 50.degree. and filtered at 20.degree.. Addn. of NaCl 125 to the filtrate ppts. a dye, which is stirred with 15% NaCl 100 parts, filtered, and washed with 15% NaCl. A soln. contg, the dye 1, melamine-HCHO precondensate 10, NH4SCN 1, and nonionic wetting agent 0.2% padded on cotton (100% pickup), dried at 70.degree., baked 3 min. at 150.degree., washed, etc., yields a bright reddish blue fabric. Other dyes are prepd. similarly (reactants and shade of the product on cellulose given): I, N-methylglucamine (III), reddish blue; tri-Na 1-amino-4-[4'-(.beta.-chloropropionamido)anilino]anthraquinone-2,3',5-trisulfonate, II, greenish blue; di-Na 1-amino-4-[4'-(N-methyl-.beta.-chloropropionamido)anilino]anthraquinone-2,3'-disulfonate, H, reddish blue; di-Na bis(.beta.-chloroethylsulfamoyl)-1,4-bis [4 - (2 - methoxyphenoxy)anilino]anthraquinonedisulfonate, III, green; di-Na salt of 1-amino-4- [4'-methyl-3'-[(.beta.-sulfatoethylsulfonyl)methyl]anilino]anthraquinone-2-sulfonic acid, III, blue; di-Na 1-amino-4-[3'-(chloroacetamido)anilino]anthraquinone-2,4'-disulfonate, III, reddish blue; di-Na 1-amino-4-[4'-(2-chloro-N-methylacetamido)anilino]anthraquinone-2,3'-disulfonate, III, -; di-Na 1-amino-4-[4'-(2-chloro - N- ethylacetamido)anilino]anthraquinone - 2,3' - disulfonate, III, -; di-K salt of 1-amino-4-3'-(.beta.-sulfatoethylsulfamoyl)-anilino]anthraquinone-2-sulfonic acid, III, reddish blue; di-K salt of 1-amino-4-[.beta.-[.alpha.-(.beta.-sulfatoethyl)ethylsulfamoyl]anilino]-anthraquinone-2-sulfonic acid, III, -; di-K salt of 1-amino-4-[3'-[N - (.degree. - sulfatoethyl)-N-methylsul famoyl] anilino] anthraquinone-2-sulfonic acid, III, -; Cu 3-Pe[SO2NHC6H4(SO2CH2CH2O-SO3K)-3]SO3K, III, bright greenish blue; Cu 3-Pc[SO2NHC6H3-(SO2CH2CH2OSO3K)Me-3,4]SO2K, III, -; Cu 3-Pc(SO2NH-CH2CH2Cl)(SO2NH2)SO3H (IV), III, bright greenish blue; Cu-Pc(SO2NHCH2CH2Cl)SO3H (V), III, -; Cu 3-PcSO2N(Me)-CH2CH2Cl]SO3H (VI), III, -; Cu 3-Pc[SO2N(Et)CH2CH2Cl]-SO3H (VII), III, -; IV, N-ethylglucamine (VIII), -; V, VIII, -; VI, VIII, -; VII, VIII, -; IV, N-(.degree.-hydroxyethyl)gluca-mine (IX), -; V, IX, -; VI, IX, -; VII, IX, -; IV, glucosamine (X), -; V, X, -; VI, X, -; VII, X, -; Cu 4-PcSO2N-(Me)CH2(CHOH)4CH2OH](SO2NHCH2CH2Cl)SO3H, III, -; Cu 4-Pe(SO2NHCH2CH2OH)(SO2NHCH2CH2Cl)SO3H, III, -; Cu 4-Pc(SO2NHCH2CHClCH2Cl)(SO2NH2)SO3H, III, -; Cu 4-Pc(SO2NHCH2CHOHCH2Cl)(SO3NH)SO3H, III, -; tri-Na salt of the Cu complex of

8-acetamido-2-[2-hydroxy-5-(.degree.sulfatoethylsulfonyl)phenylazo]-1-hydroxy-3,6-naphthalenedisulfonic acid, III, red-violet. Coupling 4-H2NC6H4COCH2N(Me)CH2(CHOH)4CH2OH to 1-(3-sulfophenyl)-3-methyl-5-pyrazolone (XI) yields a dye, yellow on cellulose. Also yellow on cellulose are 4-H2NC6H4SO2N(Me)[CH2CH2N(Me)CH2(CHOH)4CH2OH] .fwdarw. XI and 4-H2NC6H4N(Et)COCH2N(Me)CH2(CHOH)4CH2OH .fwdarw. XI.

IT **101058-41-7**, 2-Anthracenesulfonic acid, 1-amino-4-[4-[3-[(2,3-dihydroxypropyl)amino]-N-methylpropionamido]-3-sulfoanilino]-9,10-dihydro-9,10-dioxo-, disodium salt **102959-71-7**, 1,6-Anthracenedisulfonic acid, 5-amino-8-[4-[3-[(2,3-dihydroxypropyl)amino]propionamido]-3-sulfoanilino]-9,10-dihydro-9,10-dioxo-, trisodium salt **103908-80-1**, 2-Anthracenesulfonic acid, 1-amino-9,10-dihydro-4-[3-[2-[methyl(gluco-2,3,4,5,6-pentahydroxyhexyl)amino]acetamido]-4-sulfoanilino]-9,10-dioxo-, disodium salt **106991-19-9**, 2-Anthracenesulfonic acid, 1-amino-9,10-dihydro-4-[m-[[2-[methyl-(gluco-2,3,4,5,6-pentahydroxyhexyl)amino]ethyl]sulfamoyl]anilino]-9,10-dioxo-, **potassium** salt **109040-88-2**, Copper, [hydrogen 3'-[[m-[N-methyl-N-(gluco-2,3,4-5,6-pentahydroxyhexyl)tauryl]phenyl]sulfamoyl]phthalocyaninesulfonato(2-)]-, **potassium** salt
(prepn. of)

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=> d stat que l37 nos
L3              STR
L4  (       293)SEA FILE=REGISTRY SSS FUL L3
L5              STR
L6  (         4)SEA FILE=REGISTRY SUB=L4 SSS FUL L5
L7          289 SEA FILE=REGISTRY ABB=ON  PLU=ON  L4 NOT L6
L8           91 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L7
L9            1 SEA FILE=REGISTRY ABB=ON  PLU=ON  OLIGOETHER/BI
L10         168 SEA FILE=REGISTRY ABB=ON  PLU=ON  POLYETHER/BI OR POLYETHERS/BI

L11     1273885 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L9 OR L10 OR ?ETHER?
L12          12 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L11 AND L8
L23           7 SEA FILE=HCAPLUS ABB=ON  PLU=ON  (L8 AND (ION OR METAL)) NOT
                L12
L24           7 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L23 NOT L12
L37          10 SEA FILE=HCAPLUS ABB=ON  PLU=ON  (L8 AND (NI2? OR LI OR NA OR
                K OR MG2? OR CA2? OR SR2? OR BA2? OR AL3?)) NOT (L12 OR L24)


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=> d ibib abs hitrn l37 1-10

L37  ANSWER 1 OF 10  HCAPLUS  COPYRIGHT 2003 ACS
ACCESSION NUMBER:         1990:120601  HCAPLUS
DOCUMENT NUMBER:          112:120601
TITLE:                    Water-soluble, monoazo dyes containing a ureido group
                          and two sulfonyl fiber-reactive groups
INVENTOR(S):              Thompson, Glenn A.; Corso, Anthony J.; Steuernagel,
                          Hans H.
PATENT ASSIGNEE(S):       Crall, Hugh C., USA; Hoechst Celanese Corp.
SOURCE:                   U.S., 14 pp.
                          CODEN: USXXAM
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.      KIND  DATE           APPLICATION NO.   DATE
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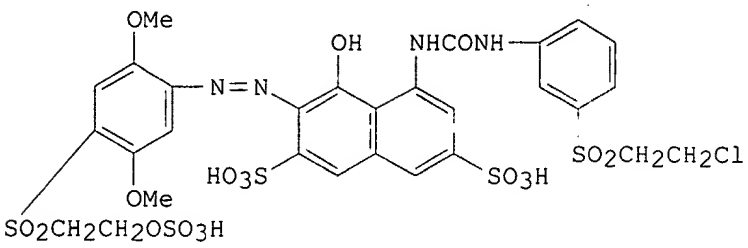
US 4855411 A 19890808 US 1988-170585 19880317
PRIORITY APPLN. INFO.: US 1988-170585 19880317
OTHER SOURCE(S): CASREACT 112:120601; MARPAT 112:120601
GI



I

AB The title dyes XSO2AN:NQN(R)CONHZSO2Y [A, Q = (un)substituted phenylene or (un)substituted naphthalene residues; R = H, C1-4 alkyl, sulfonated lower alkyl; X, Y = CH:CH2, CH2CH2SSO3H, CH2CH2Br, CH2CH2OAc, CH2CH2OH7 CH2CH2OPO3H2, CH2CH2OSO2Me, CH2CH2OPh, CH2CH2OSO3H, CH2CH2Cl, CH2CH2OSO2Ph, CH2CH2N(R1)R2; R1, R2 = R; Z = (un)substituted Ph], which dye cellulosic fabrics in fast shades, are prepd. Thus, 1-amino-8-hydroxy-3,6-naphthalenedisulfonic acid mono **Na** salt was condensed with 3-(.beta.-chloroethylsulfonyl)phenyl-1-isocyanate, and the intermediate coupled with diazotized 1-amino-2,5-dimethoxyphenyl-4-(.beta.-sulfatoethylsulfone), producing I, which dyed cotton a fast violet shade. A soln. of I showed no chem. or phys. changes after 10 mo storage at pH .apprx.4.5.

IT **125679-24-5P**
RL: PREP (Preparation)
(manuf. of, as reactive dye)

L37 ANSWER 2 OF 10 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1988:215872 HCAPLUS
DOCUMENT NUMBER: 108:215872
TITLE: Antiarrhythmic profile of a new class 1 drug, AHR 10718, on canine atrial and ventricular arrhythmia models
AUTHOR(S): Mitsuhashi, Harumi; Hashimoto, Keitaro
CORPORATE SOURCE: Dep. Pharmacol., Yamanashi Med. Coll., Yamanashi, 409-38, Japan
SOURCE: Japanese Journal of Pharmacology (1988), 46(4), 349-58
CODEN: JJPAAZ; ISSN: 0021-5198
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Antiarrhythmic effects of AHR 10718 (I) were examd. in 2-stage coronary-ligation-, digitalis- and adrenaline-induced canine ventricular arrhythmias and aconitine-induced canine atrial arrhythmia. AHR 10718 suppressed the arrhythmias except for adrenaline-induced arrhythmia. The min. effective plasma concns. of drug against arrhythmias induced by 24-h coronary ligation, 48-h coronary ligation and digitalis were 8.1 (by 10 mg/kg, i.v.), 2.9 (by 5 mg/kg, i.v.) and 2.8 (by 5 mg/kg, i.v.) .mu.g/mL, resp. The correlation coeffs. between the antiarrhythmic effects of AHR 10718 and its plasma concns. were not high. This pharmacol. profile is characteristic of class 1 **Na** channel blockers, and in particular, it is similar to those of disopyramide, procainamide and SUN 1165 from previous studies. AHR 10718 is expected to become a clin. useful antiarrhythmic drug.

IT **96436-73-6**, AHR 10718
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES

(Uses)
(antiarrhythmic activity of)

L37 ANSWER 3 OF 10 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1988:198036 HCAPLUS
DOCUMENT NUMBER: 108:198036
TITLE: Correlation between the antiarrhythmic effects of drugs on experimental ventricular arrhythmias and their cellular electrophysiological effects.
AUTHOR(S): Hashimoto, Keitaro
CORPORATE SOURCE: Dep. Pharmacol., Yamanashi Med. Coll., Yamanashi, 409-38, Japan
SOURCE: International Congress Series (1987), 750(Pharmacology), 497-500
CODEN: EXMDA4; ISSN: 0531-5131
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The effects of various cardiac drugs on 2-stage coronary artery ligation-, digitalis-, and adrenaline-induced arrhythmias were studied in dogs. The class 1 antiarrhythmics were divided into 3 classes: those effective in all 3 models, those with no effect or causing worsening in adrenaline-induced arrhythmia, and lidocaine, which was only effective in digitalis-induced arrhythmia. The class 2 .beta.-blockers were effective on adrenaline arrhythmias, and some, at high doses, on other arrhythmias. The class 4 **Ca2**+-channel blockers also suppressed adrenaline arrhythmias, and one, KT362, suppressed all 3 types.
IT **96436-73-6**, AHR10718
RL: BIOL (Biological study)
(heart arrhythmia inhibition by)

L37 ANSWER 4 OF 10 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1985:214833 HCAPLUS
DOCUMENT NUMBER: 102:214833
TITLE: Electrophysiologic effects of AHR 10718 on isolated cardiac tissues
AUTHOR(S): Damiano, Bruce P.; Le Marec, Herve; Rosen, Michael R.
CORPORATE SOURCE: Coll. Physicians Surg., Columbia Univ., New York, NY, 10032, USA
SOURCE: European Journal of Pharmacology (1985), 108(3), 243-55
CODEN: EJPHAZ; ISSN: 0014-2999
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The electrophysiol. effects of the new antiarrhythmic compd. AHR 10718 (N'-(2-(diethylamino)ethyl)-N-(1-methylethyl)-N-(2-(phenylsulfonyl)ethyl)urea,(Z)-butanedioate)(I) [**96436-73-6**] were studied in canine cardiac tissues. In Purkinje fibers, I dose-dependently decreased the max. rate of rise (Vmax) of phase 0 of the action potential and decreased conduction velocity and action potential duration. In addn., membrane responsiveness was depressed and the effective refractory period shortened. The effects of I were not highly dependent on the extracellular **K**+ concn. Vmax of ventricular muscle action potentials also was reduced. However, in contrast to Purkinje fibers, ventricular muscle action potentials were prolonged by I. I had no effect on slow response action potentials induced by isoproterenol and high **K**+. I decreased normal automaticity, catecholamine-enhanced automaticity, and abnormal automaticity induced by Ba or myocardial infarction. It also suppressed triggered activity and reduced delayed afterdepolarization amplitude in ouabain-treated Purkinje fibers and infarcted myocardium. I may be effective against arrhythmias resulting from conduction disturbances and certain forms of abnormal impulse initiation.
IT **96436-73-6**

RL: BIOL (Biological study)
(heart electrophysiol. to, antiarrhythmic mechanism in relation to)

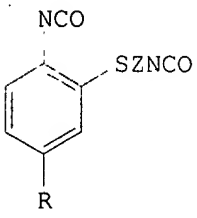
L37 ANSWER 5 OF 10 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1984:419748 HCAPLUS
DOCUMENT NUMBER: 101:19748
TITLE: Immobilized polynucleotide phosphorylase. III. Formation of the enzyme-polynucleotide complex
AUTHOR(S): Liu, Nianjuan; Zhang, Yuying; Yang, Kaiyu
CORPORATE SOURCE: Inst. Microbiol., Acad. Sin., Beijing, Peop. Rep. China
SOURCE: Weishengwu Xuebao (1983), 24(1), 50-7
CODEN: WSHPA8; ISSN: 0001-6209
DOCUMENT TYPE: Journal
LANGUAGE: Chinese
AB The polynucleotide synthesized by immobilized polynucleotide phosphorylase (PNPase) was bound with the enzyme during polymn., forming an enzyme-polynucleotide complex. The use of immobilized enzyme facilitates the isolation of the complex with the easy sepn. of immobilized enzyme from the reaction mixt. Anal. of polymn. products showed no intermediate oligonucleotides; only remaining substrates and polymers with a high mol. wt. were detected. Apparently, the polymn. process catalyzed by immobilized PNPase involves a processive mechanism. When immobilized PNPase was incubated with substrate (ADP, CDP, or IDP) at optimum pH 8-9 for a long time without addn. of divalent cations, polymn. did occur, and the synthesized polynucleotides were also bound with the enzyme mols. Under identical conditions no polymn. was detected with native PNPase. This difference might be due to either the presence of small amts. of divalent cation on the carrier of ABSE-agarose or an unusual property caused by immobilization. The presence of substrate (without addn. of **Mg2+**) remarkably enhanced the stability of immobilized enzyme. The immobilized PNPase was used >680 times. In addn. to the immobilization, the superior operation stability of immobilized PNPase is due to the substrate and polynucleotide protection. Divalent cation (**Mg2+**) and pH 8-9 also exhibited good effects on the stability of enzyme. Among all these factors, the polynucleotide bound with the enzyme during polymn. greatly contributed to the stability of immobilized PNPase. Probably, the ABSE-agarose carrier-enzyme-polynucleotide ternary complex provides the best conformation for the stability of the enzyme.
IT **80111-44-0**
RL: BIOL (Biological study)
(polynucleotide phosphorylase immobilized on, stabilization of, by polynucleotides and other compds.)

L37 ANSWER 6 OF 10 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1981:104676 HCAPLUS
DOCUMENT NUMBER: 94:104676
TITLE: Sulfur-containing diisocyanates and their use in preparing polyurethanes
INVENTOR(S): Schwindt, Juergen; Groegler, Gerhard; Ganster, Otto; Koster, Johannes
PATENT ASSIGNEE(S): Bayer A.-G., Fed. Rep. Ger.
SOURCE: Ger. Offen., 48 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2916135	A1	19801030	DE 1979-2916135	19790420
CA 1130304	A1	19820824	CA 1980-348518	19800326

US 4387057	A	19830607	US 1980-136624	19800402
EP 17883	A1	19801029	EP 1980-101845	19800405
EP 17883	B1	19811021		
R: AT, BE, CH, DE, FR, GB, IT, NL, SE				
AT 322	E	19811115	AT 1980-101845	19800405
AU 8057604	A1	19801023	AU 1980-57604	19800418
AU 532064	B2	19830915		
ES 490705	A1	19810416	ES 1980-490705	19800418
JP 56043259	A2	19810421	JP 1980-50545	19800418
ZA 8002321	A	19810930	ZA 1980-2321	19800418
PRIORITY APPLN. INFO.:			DE 1979-2916135	19790420
			EP 1980-101845	19800405

GI



I

AB The title isocyanates I (R = H, Br, Cl, alkylsulfonyl, alkoxy, or alkylthio, Z = C2 or higher alkylene or substituted or unsubstituted p-phenylene) are prepd. and used in the manuf. of rapid-curing urethane elastomers. Thus, 2,4'-diaminodiphenyl sulfide [6259-01-4] was prepd. by coupling **Na** o-aminothiophenoxide [52380-58-2] with 4-nitrochlorobenzene [100-00-5] and hydrogenating, and was phosgenated to give 2,4'-diisocyanatodiphenyl sulfide (I, R = H, Z = p-phenylene)(II) [75790-87-3]. A mixt. of 100 parts polypropylene glycol-polyoxypropylene triol prepolymer with NCO content 3.55% and 31.63 parts II was combined at 60.degree. with 10.82 parts 2-ethylhexyl 3,5-diamino-4-methylbenzoate, giving a compn. which remained castable for 1.5 min at 70.degree.. The compn. was poured into a mold preheated to 110.degree., could be removed after 1 min, and reached an acceptable strength level after 2 min. A control prepd. using 2,4-TDI instead of II required 3.5 min before removing and reached acceptable strength only after 7 min. Other phys. properties were comparable.

IT **76806-18-3P**
RL: PREP (Preparation)
(manuf. of, for rapid-curing urethane elastomer synthesis)

L37 ANSWER 7 OF 10 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1973:5402 HCAPLUS
DOCUMENT NUMBER: 78:5402
TITLE: Fiber-reactive azo and anthraquinone dyes
INVENTOR(S): Berner, Klaus; Hoyer, Ernst; Sommer, Karl
PATENT ASSIGNEE(S): Farbwerke Hoechst A.-G.
SOURCE: Ger. Offen., 58 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2106648	A	19720824	DE 1971-2106648	19710212
DE 2106648	B2	19791011		
DE 2106648	C3	19800626		

PRIORITY APPLN. INFO.: DE 1971-2106648 19710212
AB Fifteen water-sol. dyes, R[SO2CH2CH2N(CH2CH2OSO3M)2]n (n = 1 or 2; M = H, **K**, or **Na**, R = azo or anthraquinone dye residue free of water-solubilizing groups), were prepd. starting from H2NQSO2CH:CH2 (Q = arylene) and used for dyeing and printing, e.g. silk, wool, polyamide, and cotton-polyester. Thus, a mixt. of 4,2,5-H2N(MeO)2C6H2SO2CH:CH2 and (HOCH2CH2)2NH was heated 3 hr at 100.deg., the mixt. dissolved in pyridine, H2NSO3H added, the mixt. heated 30 min at 100-5.deg., diazotized, coupled with 3-methyl-1-phenyl-5-pyrazolone, and salted to give fiber-reactive dye I [37114-73-1], dyeing wool a level, wetfast yellow shade.
IT **40082-39-1P 40082-82-4P**
RL: IMF (Industrial manufacture); PREP (Preparation)
(prepn. of)

L37 ANSWER 8 OF 10 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1966:67255 HCAPLUS
DOCUMENT NUMBER: 64:67255
ORIGINAL REFERENCE NO.: 64:12537b-c
TITLE: Researches on organophosphorus insecticides. VIII. The preparations and chemical reactions of sodium salts of O-ethyl N,N-diethylphosphoramido mono (or di)-thioacids
AUTHOR(S): Yang, Shih-Hsien; Chen, Tien-Chih; Wang, Chin-Sun; Chin, Kuei-Yu; Shao, Shu-Lien; Liu, Lun-Tsu
CORPORATE SOURCE: Nankai Univ., Tientsin, Peop. Rep. China
SOURCE: Huaxue Xuebao (1965), 31(5), 406-11
CODEN: HHHPA4; ISSN: 0567-7351
DOCUMENT TYPE: Journal
LANGUAGE: Chinese
AB cf. CA 64, 11240h. The prepns. and chem. properties of the **Na** salts of O-ethyl N,N-diethylphosphoramido mono(or di)-thioacids (I and II) were reported. I or II reacted with alkyl halides to give the corresponding alkyl esters. By acidifying with dil. HCl, I and II were converted into their corresponding acids, which, on treatment with alkyl iodide in the presence of org. bases, diazomethane, and cyclohexylamine, were transformed into the corresponding alkyl esters, methyl ester, and amide salts, resp. Reaction of II with Br or iodine gave [(EtO)(Et2N)P(S)S]2, which was transformed into (EtO)(Et2N)P(S)Cl by reacting with chlorine.
IT **5755-88-4**, Acetanilide, 4'-[[2-[(2-mercaptoethyl)amino]ethyl]sulfonyl]-, sulfate (ester)
(prepn. of)

L37 ANSWER 9 OF 10 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1964:10158 HCAPLUS
DOCUMENT NUMBER: 60:10158
ORIGINAL REFERENCE NO.: 60:1870d-h,1871a
TITLE: Water-soluble dyes containing hydroxy alkyl groups
INVENTOR(S): Heslop, Robert N.; Waite, Frederick A.
PATENT ASSIGNEE(S): Imperial Chemical Industries Ltd.
SOURCE: 9 pp.
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 927404		19630529	GB	19591120

AB (Throughout this abstr. Pc represents a phthalocyanine residue.) Azo, anthraquinone, and phthalo cyanine dyes contg. .gtoreq.1 SO3H group and an alkyl group contg. .gtoreq.2 OH groups applied to cellulose in conjunction with HCHO and (or) a resin-forming intermediate and an acid-liberating

catalyst yield dyed, crease-resistant fabrics with excellent washfastness. Thus, a soln. of the di-**Na** salt of 1-amino-4-[3'-(.beta.-sulfatoethylsulfonyl)anilino]anthraquinone-2-sulfonic acid (I) 20 and HOCH2CH(OH)CH2NH2 (II) 26 in H2O 500 parts is stirred 4 hrs. at 50.degree. and filtered at 20.degree.. Addn. of NaCl 125 to the filtrate ppts. a dye, which is stirred with 15% NaCl 100 parts, filtered, and washed with 15% NaCl. A soln. contg, the dye 1, melamine-HCHO precondensate 10, NH4SCN 1, and nonionic wetting agent 0.2% padded on cotton (100% pickup), dried at 70.degree., baked 3 min. at 150.degree., washed, etc., yields a bright reddish blue fabric. Other dyes are prepd. similarly (reactants and shade of the product on cellulose given): I, N-methylglucamine (III), reddish blue; tri-**Na** 1-amino-4-[4'-(.beta.-chloropropionamido)anilino]anthraquinone-2,3',5-trisulfonate, II, greenish blue; di-**Na** 1-amino-4- [4'-(N-methyl-.beta.-chloropropionamido)anilino]anthraquinone-2,3'-disulfonate, H, reddish blue; di-**Na** bis(.beta.-chloroethylsulfamoyl)-1,4- bis [4 - (2 - methoxyphenoxy)anilino]anthraquinonedisulfonate, III, green; di-**Na** salt of 1-amino-4-[4'-methyl-3'-[(.beta.-sulfatoethylsulfonyl)methyl]anilino]anthraquinone-2-sulfonic acid, III, blue; di-**Na** 1-amino-4-[3'-(chloroacetamido)anilino]anthraquinone-2,4'-disulfonate, III, reddish blue; di-**Na** 1-amino-4-[4'-(2-chloro-N-methylacetamido)anilino]anthraquinone-2,3'-disulfonate, III, -; di-**Na** 1-amino-4-[4'-(2-chloro - N- ethylacetamido)anilino]anthraquinone - 2,3' - disulfonate, III, -; di-**K** salt of 1-amino-4-3'-(.beta.-sulfatoethylsulfamoyl)-anilino]anthraquinone-2-sulfonic acid, III, reddish blue; di-**K** salt of 1-amino-4-[.beta.-[.alpha.-(.beta.-sulfatoethyl)ethylsulfamoyl]anilino]-anthraquinone-2-sulfonic acid, III, -; di-**K** salt of 1-amino-4-[3'-[N - (.degree. - sulfatoethyl)-N-methylsul famoyl] anilino] anthraquinone-2-sulfonic acid, III, -; Cu 3-Pe[SO2NHC6H4(SO2CH2CH2O-SO3K)-3]SO3K, III, bright greenish blue; Cu 3-Pc[SO2NHC6H3-(SO2CH2CH2OSO3K)Me-3,4]SO2K, III, -; Cu 3-Pc(SO2NH-CH2CH2Cl)(SO2NH2)SO3H (IV), III, bright greenish blue; Cu-Pc(SO2NHCH2CH2Cl)SO3H (V), III, -; Cu 3-PcSO2N(Me)-CH2CH2Cl]SO3H (VI), III, -; Cu 3-Pc[SO2N(Et)CH2CH2Cl]-SO3H (VII), III, -; IV, N-ethylglucamine (VIII), -; V, VIII, -; VI, VIII, -; VII, VIII, -; IV, N-(.degree.-hydroxyethyl)gluca-mine (IX), -; V, IX, -; VI, IX, -; VII, IX, -; IV, glucosamine (X), -; V, X, -; VI, X, -; VII, X, -; Cu 4-PcSO2N-(Me)CH2(CHOH)4CH2OH](SO2NHCH2CH2Cl)SO3H, III, -; Cu 4-Pe(SO2NHCH2CH2OH)(SO2NHCH2CH2Cl)SO3H, III, -; Cu 4-Pc(SO2NHCH2CHClCH2Cl)(SO2NH2)SO3H, III, -; Cu 4-Pc(SO2NHCH2CHOHCH2Cl)(SO3NH)SO3H, III, -; tri-**Na** salt of the Cu complex of 8-acetamido-2-[2-hydroxy-5-(.degree.sulfatoethylsulfonyl)phenylazo]-1-hydroxy-3,6-naphthalenedisulfonic acid, III, red-violet. Coupling 4-H2NC6H4COCH2N(Me)CH2(CHOH)4CH2OH to 1-(3-sulfophenyl)-3-methyl-5-pyrazolone (XI) yields a dye, yellow on cellulose. Also yellow on cellulose are 4-H2NC6H4SO2N(Me)[CH2CH2N(Me)CH2(CHOH)4CH2OH] .fwdarw. XI and 4-H2NC6H4N(Et)COCH2N(Me)CH2(CHOH)4CH2OH .fwdarw. XI.

IT **109040-88-2**, Copper, [hydrogen 3'-[[m-[N-methyl-N-(gluco-2,3,4-5,6-pentahydroxyhexyl)tauryl]phenyl]sulfamoyl]phthalocyaninesulfonato(2-)]-, potassium salt
(prepn. of)

L37 ANSWER 10 OF 10 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1950:38020 HCAPLUS
DOCUMENT NUMBER: 44:38020
ORIGINAL REFERENCE NO.: 44:7261d-i
TITLE: Sulfones. III. 4-Aminophenyl alkyl sulfones
AUTHOR(S): Baker, B. R.; Querry, Merle V.
CORPORATE SOURCE: Am. Cyanamid Co., Pearl River, NY
SOURCE: J. Org. Chem. (1950), 15, 413-16
CODEN: JOCEAH; ISSN: 0022-3263
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable

GI For diagram(s), see printed CA Issue.

AB Because p-H2NC6H4SO2Me has chemotherapeutic activity, some other alkyl analogs are prepd. HOCH2CH2Cl (108 cc.) heated 3 hrs. with 140 g. p-AcHNC6H4SO2H (I) in 540 cc. H2O contg. 36 g. NaOH, the ppt. filtered, and the filtrate made just alk. with 10% NaOH and heated another 3 hrs. with the soln. kept barely alk. by addn. of more NaOH, gives 54% p-AcNHC6H4SO2CH2CH2OH (II), m. 192-3.degree.. II with p-MeC6H4SO2Cl in C5H5N gives 79% p-(p-AcNHC6H4SO2CH2CH2OSO2) C6H4Me (III), m. 105-7.degree.. Heating III with piperidine gives 99% p-acetamidophenyl 2-(1-piperidyl)ethyl sulfone (IV), m. 110.degree. (with 1 H2O) 121-3.degree. (H2O-free). p-Acetamidophenyl 2-diethylaminoethyl sulfone, prepd. in 99% yield in a similar way, m. 100-2.degree.. Boiling III with 1-caxbethoxypiperazine gives 92% p-acetamidophenyl 2-(4-carbethoxy-1-piperazinyl)ethyl sulfone, m. 127-8.degree.. Refluxing 50 g. III 15 hrs. with 38 g. NaI in 380 cc. Me2CO gives 87% p-acetamidophenyl 2-iodoethyl sulfone, m. 192-3.degree.. Heating 5 g. III and 2.5 g. K phthalimide in 5 cc. PrOH 1 hr. gives 96% p-acetamidophenyl 2-phthalimidoethyl sulfone, m. 216-21.degree.. Refluxing 10 g. I 2 hrs. in 50 cc. EtOH contg. 2 g. NaOH and 2 cc. H2O with 7.5 g. PrI, dilg. the mixt. with H2O, and extg. with AcOEt give 64% p-AcHNC6H4SO2R (V) (R = Pr), m. 125-7.degree.. In a similar way the following V are prepd. (R, the refluxing time in hrs., yield, and m.p. in the order given): CH2:CHCH2, 20 min., 67%, 113-15.degree.; o-C6H4CO)2N(CH2)6, 20, 87%, 175-7.degree.; CH2CH2CO2H, 17, 42%, 182-3.degree., p-O2NC6H4CH2, 10 min., 70%, 246-50.degree., EtO2CCHBu, 2.5, 67%, 102-4.degree.. V are sapond. by boiling 15 min. with 6 N HCl (10 cc./g.), giving the following p-H2NC6H4SO2R:R = HOCH2CH2, m. 210-13.degree. (decompn.); Et2NCH2CH2, m. 102-4.degree.; C5H10NCH2CH2, m. 127-9.degree.; CH2.CH2.N(CO2Et).CH2.CH2.NCH2CH2, m. 96-8.degree. (decompn.); H2NCH2CH2, m. 235-8.degree. (decompn.); ICH2CH2, m. 206-8.degree. (decompn.); Pr, m. 215-17.degree. (decompn.); CH2:CHCH2, m. 212-13.degree. (decompn.); C8H17, m. 96-8.degree.; C12H25, m. 105-7.degree.; H2N(CH2)6, m. 217-20.degree. (decompn.); HO2CCH2CH2, m. 222-4.degree. (decompn.); p-H2NC6H4CH2, m. 215-16.degree. (decompn.); EtO2CCHBu, m. 148-50.degree. (decompn.); Me, m. 236-7.degree. (decompn.).

IT **100862-20-2**, Acetanilide, 4'-(2-diethylaminoethylsulfonyl)- (prepn. of)

=> select hit rn l12 1-12
E1 THROUGH E15 ASSIGNED

=> select hit rn l24 1-7
E16 THROUGH E47 ASSIGNED

=> select hit rn l36 1-26
E48 THROUGH E180 ASSIGNED

=> select hit rn l37 1-10
E181 THROUGH E189 ASSIGNED

=> fil reg
FILE 'REGISTRY' ENTERED AT 15:44:43 ON 09 JUN 2003
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DICTIONARY FILE UPDATES: 6 JUN 2003 HIGHEST RN 526915-11-7

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http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

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SELECT HIT RN L24 1-7
SELECT HIT RN L36 1-26
SELECT HIT RN L37 1-10

FILE 'REGISTRY' ENTERED AT 15:44:43 ON 09 JUN 2003
L39 173 S E1-E189
L40 87 S L39 AND L7

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2	RN	**518981-72-1**	REGISTRY
3	RN	**479548-95-3**	REGISTRY
4	RN	**477284-42-7**	REGISTRY
5	RN	**477284-40-5**	REGISTRY
6	RN	**477284-37-0**	REGISTRY
7	RN	**477284-36-9**	REGISTRY
8	RN	**477284-35-8**	REGISTRY
9	RN	**477284-34-7**	REGISTRY
10	RN	**392328-93-7**	REGISTRY
11	RN	**382145-35-9**	REGISTRY
12	RN	**382145-34-8**	REGISTRY
13	RN	**382145-33-7**	REGISTRY
14	RN	**382145-32-6**	REGISTRY
15	RN	**382145-31-5**	REGISTRY
16	RN	**382145-30-4**	REGISTRY
17	RN	**382145-29-1**	REGISTRY
18	RN	**382145-28-0**	REGISTRY
19	RN	**288271-21-6**	REGISTRY
20	RN	**288271-20-5**	REGISTRY
21	RN	**288271-18-1**	REGISTRY
22	RN	**288271-14-7**	REGISTRY
23	RN	**288271-13-6**	REGISTRY
24	RN	**288271-12-5**	REGISTRY
25	RN	**252017-99-5**	REGISTRY
26	RN	**221356-44-1**	REGISTRY
27	RN	**221356-42-9**	REGISTRY
28	RN	**221356-40-7**	REGISTRY
29	RN	**221355-17-5**	REGISTRY
30	RN	**221355-15-3**	REGISTRY
31	RN	**221355-13-1**	REGISTRY
32	RN	**220445-83-0**	REGISTRY
33	RN	**220445-77-2**	REGISTRY
34	RN	**219636-34-7**	REGISTRY
35	RN	**219636-33-6**	REGISTRY
36	RN	**212395-73-8**	REGISTRY
37	RN	**212209-69-3**	REGISTRY
38	RN	**204976-25-0**	REGISTRY

39	RN	173256-08-1	REGISTRY
40	RN	173256-07-0	REGISTRY
41	RN	173256-06-9	REGISTRY
42	RN	173063-35-9	REGISTRY
43	RN	173063-34-8	REGISTRY
44	RN	173063-33-7	REGISTRY
45	RN	173063-32-6	REGISTRY
46	RN	168766-92-5	REGISTRY
47	RN	168766-91-4	REGISTRY
48	RN	168766-78-7	REGISTRY
49	RN	168766-77-6	REGISTRY
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51	RN	158612-51-2	REGISTRY
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53	RN	152993-40-3	REGISTRY
54	RN	150221-19-5	REGISTRY
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56	RN	130199-16-5	REGISTRY
57	RN	130199-05-2	REGISTRY
58	RN	130198-68-4	REGISTRY
59	RN	128603-98-5	REGISTRY
60	RN	125679-24-5	REGISTRY
61	RN	125651-31-2	REGISTRY
62	RN	109040-88-2	REGISTRY
63	RN	105038-63-9	REGISTRY
64	RN	105038-61-7	REGISTRY
65	RN	105015-18-7	REGISTRY
66	RN	105015-17-6	REGISTRY
67	RN	104994-17-4	REGISTRY
68	RN	104994-16-3	REGISTRY
69	RN	104994-15-2	REGISTRY
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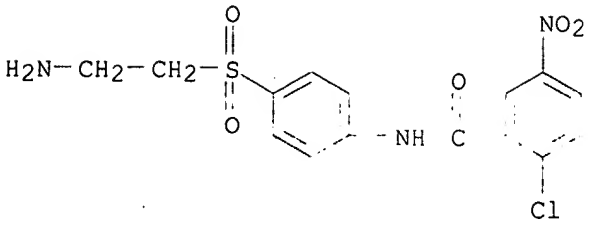
71	RN	100862-20-2	REGISTRY
72	RN	96436-73-6	REGISTRY
73	RN	88640-57-7	REGISTRY
74	RN	80111-44-0	REGISTRY
75	RN	76806-18-3	REGISTRY
76	RN	72959-14-9	REGISTRY
77	RN	72564-55-7	REGISTRY
78	RN	40330-87-8	REGISTRY
79	RN	40082-82-4	REGISTRY
80	RN	40082-39-1	REGISTRY
81	RN	37710-59-1	REGISTRY
82	RN	29244-86-8	REGISTRY
83	RN	24273-68-5	REGISTRY
84	RN	7291-83-0	REGISTRY
85	RN	6730-50-3	REGISTRY
86	RN	5755-88-4	REGISTRY
87	RN	1021-56-3	REGISTRY

=>
=>
=> d ide can l40 1 3 4 10 11 19 25 26 29 32 34 36 37 38 39 42 46 51 52 53 54 56 58 59 60 61 62 63 65 67 70 71 72 73 74 75 76 77 78 79 81 82 83 84 85 86 87

L40 ANSWER 1 OF 87 REGISTRY COPYRIGHT 2003 ACS
RN 518981-73-2 REGISTRY
CN Benzamide, N-[4-[(2-aminoethyl)sulfonyl]phenyl]-2-chloro-5-nitro-, monohydrochloride (9CI) (CA INDEX NAME)
MF C15 H14 Cl N3 O5 S . Cl H
SR CA
LC STN Files: CA, CAPLUS



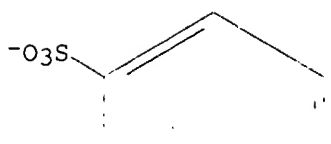
● HCl

1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

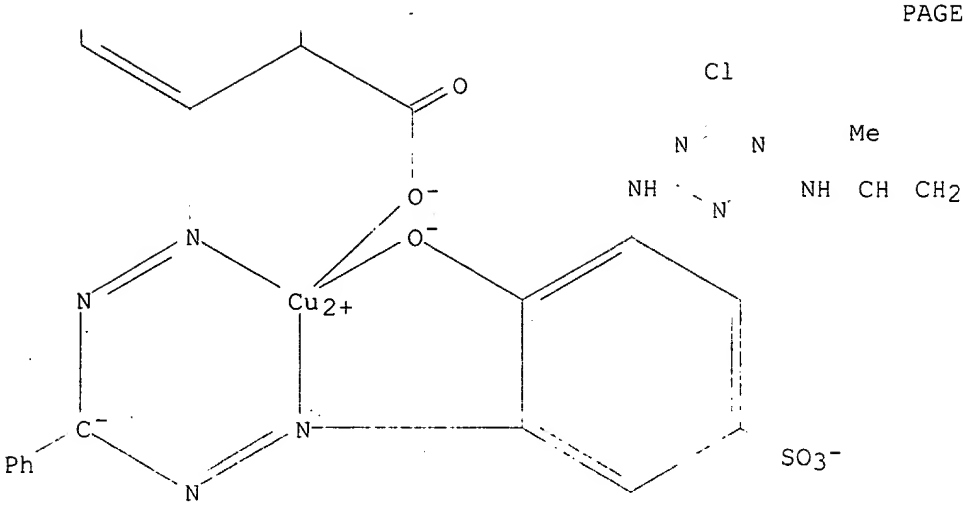
REFERENCE 1: 138:368620

L40 ANSWER 3 OF 87 REGISTRY COPYRIGHT 2003 ACS
RN **479548-95-3** REGISTRY
CN Cuprate(5-), [.mu.-[2-[[[[3-[[4-chloro-6-[[2-[[2-[[4-(hydroxy-.kappa.O)-3-[[2-(hydroxy-.kappa.O)-3,6-disulfo-1-naphthalenyl]azo-.kappa.N1]phenyl]sulfonyl]ethyl]amino]-1-methylethyl]amino]-1,3,5-triazin-2-yl]amino]-2-(hydroxy-.kappa.O)-5-sulfophenyl]azo-.kappa.N2]phenylmethyl]azo-.kappa.N1]-4-sulfobenzoato(9-)]]di-, pentahydrogen (9CI) (CA INDEX NAME)
MF C44 H30 Cl Cu2 N12 O19 S5 . 5 H
CI CCS
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

PAGE 1-A

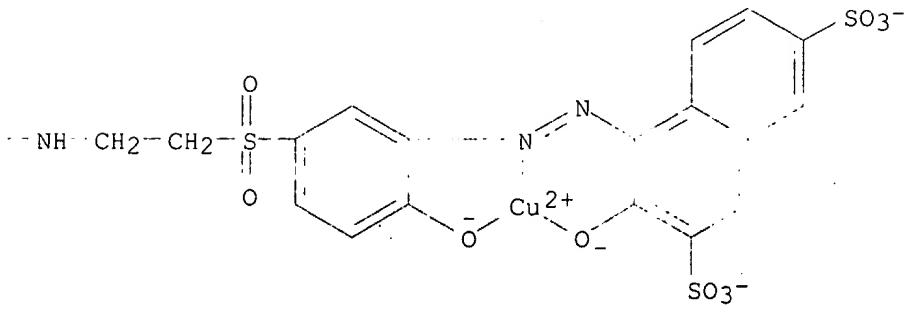


PAGE 2-A



●5 H^+

PAGE 2-B

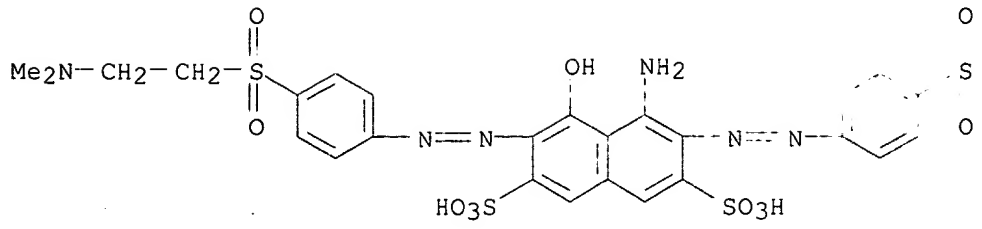


1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 138:57470

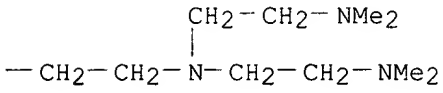
L40 ANSWER 4 OF 87 REGISTRY COPYRIGHT 2003 ACS
RN **477284-42-7** REGISTRY
CN 2,7-Naphthalenedisulfonic acid, 4-amino-3-[[4-[[2-[bis[2-(dimethylamino)ethyl]amino]ethyl]sulfonyl]phenyl]azo]-6-[[4-[[2-(dimethylamino)ethyl]sulfonyl]phenyl]azo]-5-hydroxy-, disodium salt (9CI) (CA INDEX NAME)
MF C36 H49 N9 O11 S4 . 2 Na
SR CA
LC STN Files: CA, CAPLUS
CRN (477284-41-6)

PAGE 1-A



●2 Na

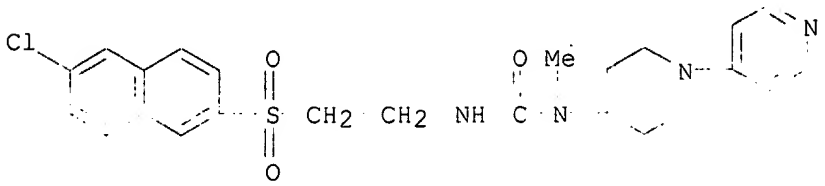
PAGE 1-B



1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 138:5591

L40 ANSWER 10 OF 87 REGISTRY COPYRIGHT 2003 ACS
RN **392328-93-7** REGISTRY
CN Urea, N'-[2-[(6-chloro-2-naphthalenyl)sulfonyl]ethyl]-N-methyl-N-[1-(4-pyridinyl)-4-piperidinyl]- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN N-[2-[(6-Chloro-2-naphthyl)sulfonyl]ethyl]-N'-methyl-N'-[1-(4-pyridyl)-4-piperidinyl]urea
FS 3D CONCORD
MF C24 H27 Cl N4 O3 S
SR CA
LC STN Files: CA, CAPLUS



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

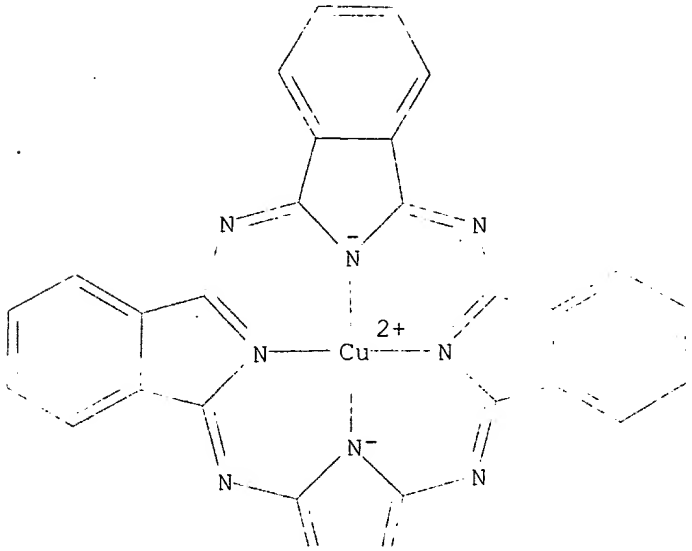
REFERENCE 1: 136:134784

L40 ANSWER 11 OF 87 REGISTRY COPYRIGHT 2003 ACS
RN **382145-35-9** REGISTRY
CN Cuprate(3-), [C-[[[4-[[2-[(3,3,5,5-tetramethylhexyl)amino]ethyl]sulfonyl]p

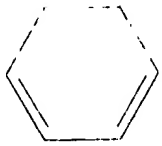
henyl]amino]sulfonyl]-29H,31H-phthalocyanine-C,C,C-trisulfonato(5-)-.kappa.N29,.kappa.N30,.kappa.N31,.kappa.N32]-, trihydrogen (9CI) (CA INDEX NAME)

MF C50 H43 Cu N10 O13 S5 . 3 H
CI CCS, IDS
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

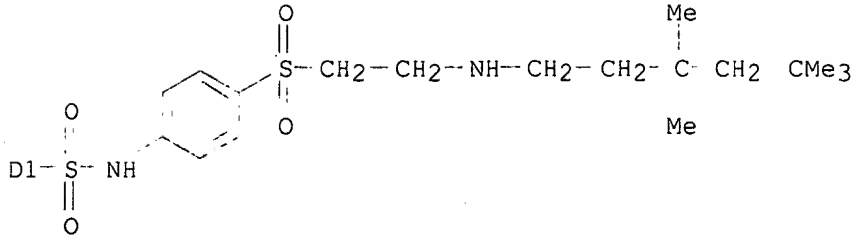
PAGE 1-A



PAGE 2-A



3 D1 SO_3^-



PAGE 3-A

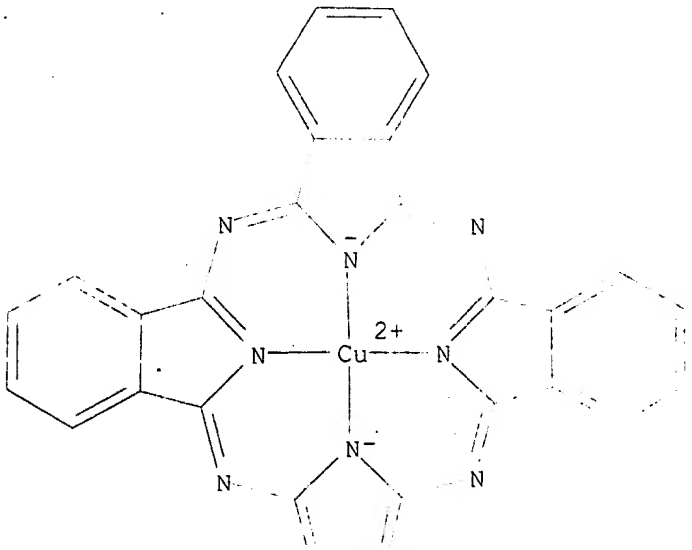
● 3 H^+

1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

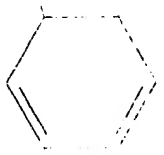
REFERENCE 1: 136:55223

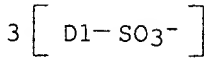
L40 ANSWER 19 OF 87 REGISTRY COPYRIGHT 2003 ACS
RN **288271-21-6** REGISTRY
CN Cuprate(3-), [C-[[[4-[[2-[bis(2-hydroxyethyl)amino]ethyl]sulfonyl]phenyl]amino]sulfonyl]-29H,31H-phthalocyanine-C,C,C-trisulfonato(5-)-.kappa.N29,.kappa.N30,.kappa.N31,.kappa.N32]-, tripotassium (9CI) (CA INDEX NAME)
MF C44 H31 Cu N10 O15 S5 . 3 K
CI CCS, IDS
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

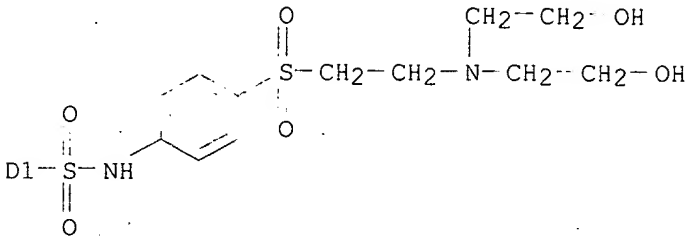
PAGE 1-A



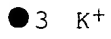
PAGE 2-A







PAGE 3-A



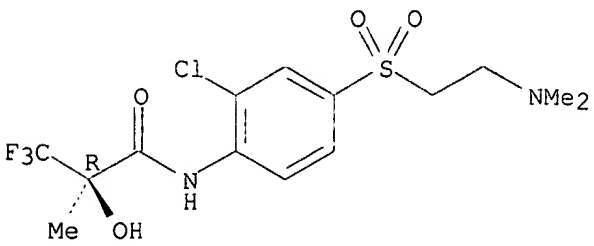
2 REFERENCES IN FILE CA (1957 TO DATE)
2 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 136:55223

REFERENCE 2: 133:178901

L40 ANSWER 25 OF 87 REGISTRY COPYRIGHT 2003 ACS
RN **252017-99-5** REGISTRY
CN Propanamide, N-[2-chloro-4-[[2-(dimethylamino)ethyl]sulfonyl]phenyl]-3,3,3-trifluoro-2-hydroxy-2-methyl-, (2R)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C14 H18 Cl F3 N2 O4 S
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.



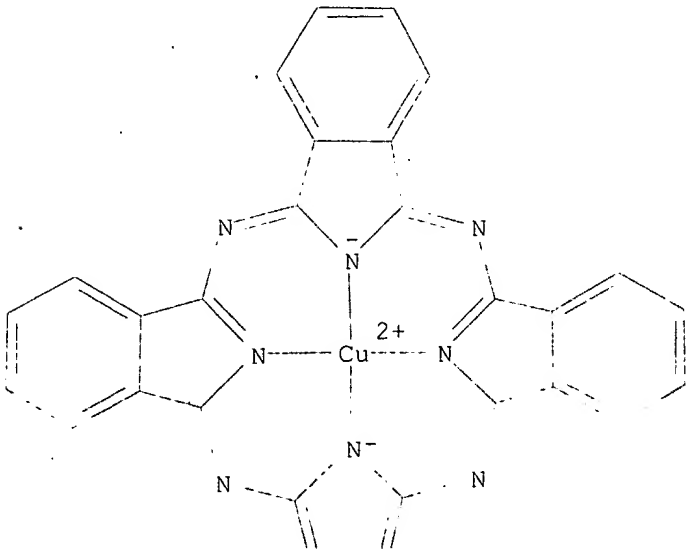
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 132:22753

L40 ANSWER 26 OF 87 REGISTRY COPYRIGHT 2003 ACS
RN **221356-44-1** REGISTRY
CN Cuprate(2-), [C,C-bis[[[4-[[2-[[3-[4-(3-aminopropyl)-1-piperazinyl]propyl]amino]ethyl]sulfonyl]phenyl]amino]sulfonyl]-29H,31H-phthalocyanine-C,C-disulfonato(4-)-.kappa.N29,.kappa.N30,.kappa.N31,.kappa.N32]-, diammonium (9CI) (CA INDEX NAME)
MF C68 H76 Cu N18 O14 S6 . 2 H4 N
CI CCS, IDS
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

PAGE 1-A



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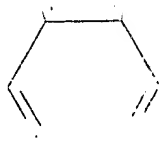
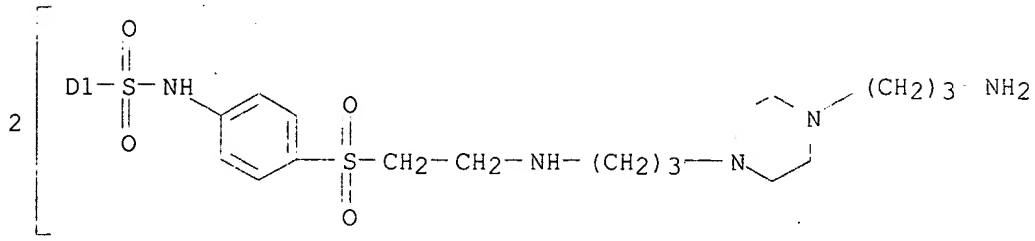


2 [D1—SO_3^-]



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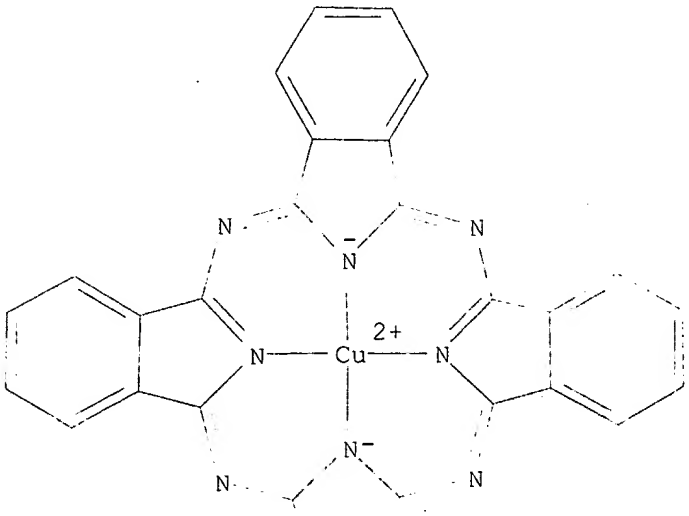
●2 NH_4^+

1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 130:238784

L40 ANSWER 29 OF 87 REGISTRY COPYRIGHT 2003 ACS
RN **221355-17-5** REGISTRY
CN Cuprate(2-), [C,C-bis[[[4-[[2-[[3-[4-(3-aminopropyl)-1-piperazinyl]propyl]amino]ethyl]sulfonyl]phenyl]amino]sulfonyl]-29H,31H-phthalocyanine-C,C-disulfonato(4-)-.kappa.N29,.kappa.N30,.kappa.N31,.kappa.N32]-, dihydrogen (9CI) (CA INDEX NAME)
MF C68 H76 Cu N18 O14 S6 . 2 H
CI CCS, IDS
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

PAGE 1-A



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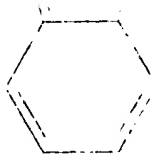

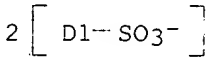

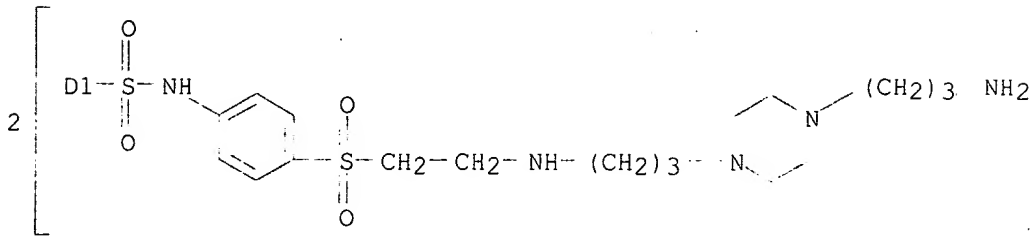

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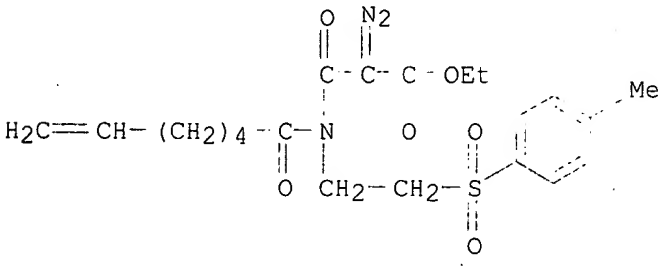
PAGE 3-A

●2 H^+

1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 130:238784

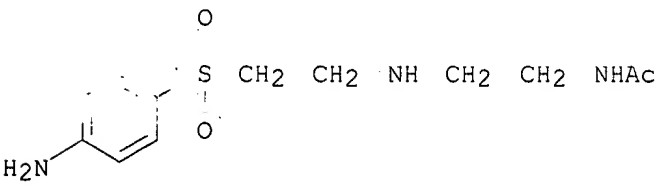
L40 ANSWER 32 OF 87 REGISTRY COPYRIGHT 2003 ACS
RN **220445-83-0** REGISTRY
CN Propanoic acid, 2-diazo-3-[[2-[(4-methylphenyl)sulfonyl]ethyl](1-oxo-6-heptenyl)amino]-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C21 H27 N3 O6 S
SR CA
LC STN Files: CA, CAPLUS, CASREACT



1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 130:168225

L40 ANSWER 34 OF 87 REGISTRY COPYRIGHT 2003 ACS
RN **219636-34-7** REGISTRY
CN Acetamide, N-[2-[[2-[(4-aminophenyl)sulfonyl]ethyl]amino]ethyl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C12 H19 N3 O3 S
SR CA
LC STN Files: CA, CAPLUS, USPATFULL



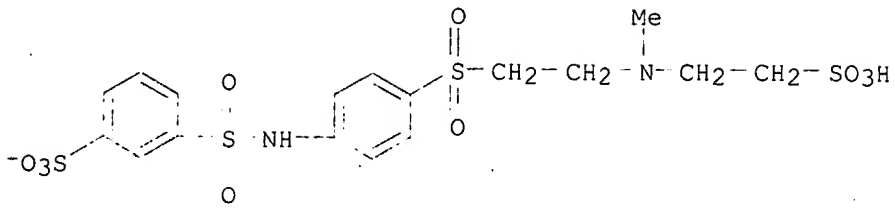
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

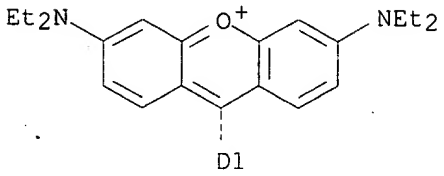
1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 130:111502

L40 ANSWER 36 OF 87 REGISTRY COPYRIGHT 2003 ACS
RN **212395-73-8** REGISTRY
CN Xanthylium, 3,6-bis(diethylamino)-9-[2(or 4)-[[[4-[[2-[methyl(2-sulfoethyl)amino]ethyl]sulfonyl]phenyl]amino]sulfonyl]-4(or 2)-sulfophenyl]-, inner salt (9CI) (CA INDEX NAME)
MF C38 H46 N4 O11 S4
CI IDS
SR CA

LC STN Files: CA, CAPLUS





1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 129:217900

L40 ANSWER 37 OF 87 REGISTRY COPYRIGHT 2003 ACS
RN **212209-69-3** REGISTRY
CN 1,2-Ethanediaminium, N,N-bis[2-[[6-[[8-(benzoylamino)-1-hydroxy-3,6-disulfo-2-naphthalenyl]azo]-4-sulfo-2-naphthalenyl]sulfonyl]ethyl]-N'-(3-hydroxypropyl)-N,N',N'-trimethyl-, bis(methyl sulfate) (salt), hexasodium salt (9CI) (CA INDEX NAME)
MF C66 H64 N8 O27 S8 . 2 C H3 O4 S . 6 Na
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

CM 1

CRN 212209-68-2
CMF C66 H64 N8 O27 S8

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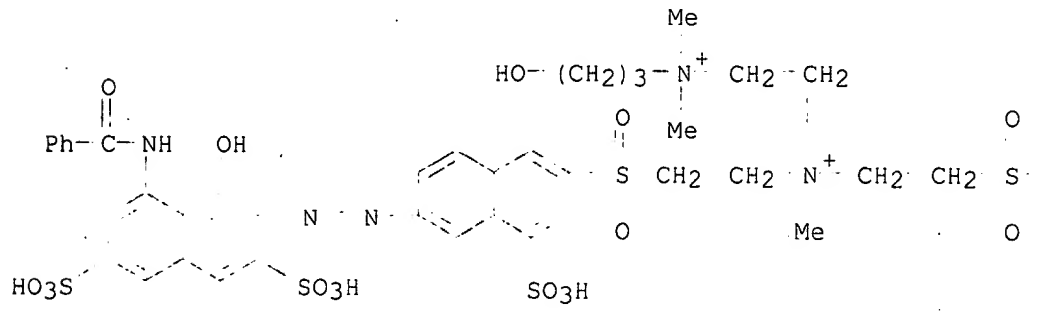

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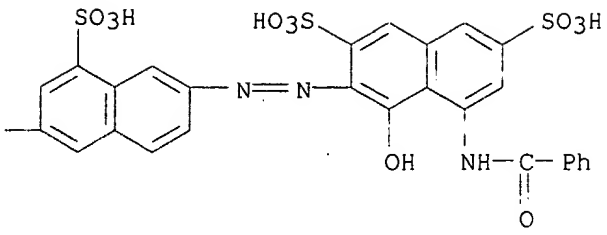

CM 2

CRN 21228-90-0
CMF C H3 O4 S

Me O SO_3^-

1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 129:218065

L40 ANSWER 38 OF 87 REGISTRY COPYRIGHT 2003 ACS
RN **204976-25-0** REGISTRY
CN 1,2-Ethanediaminium, N,N-bis[2-[[6-[[8-(benzoylamino)-1-hydroxy-3,6-disulfo-2-naphthalenyl]azo]-5-sulfo-2-naphthalenyl]sulfonyl]ethyl]-N'-(3-hydroxypropyl)-N,N',N'-trimethyl-, bis(methyl sulfate) (salt), hexasodium salt (9CI) (CA INDEX NAME)
MF C66 H64 N8 O27 S8 . 2 C H3 O4 S . 6 Na
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

CM 1

CRN 204976-24-9
CMF C66 H64 N8 O27 S8

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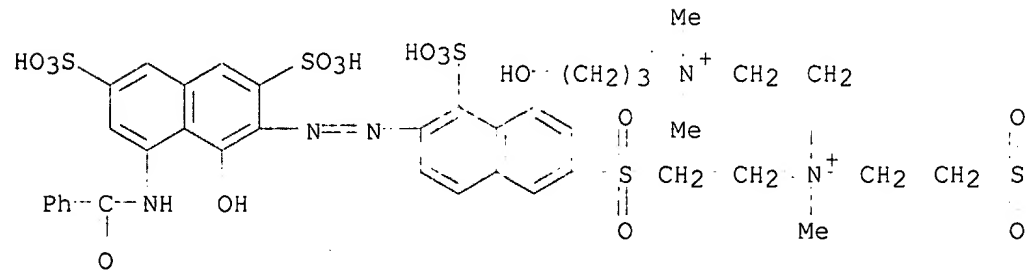

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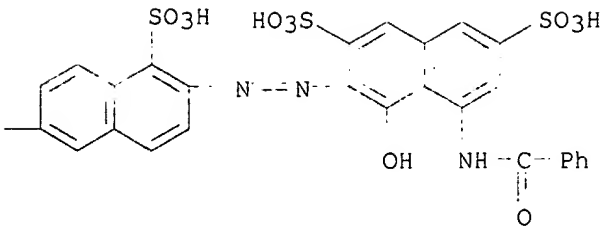


CM 2

CRN 21228-90-0
CMF C H3 O4 S

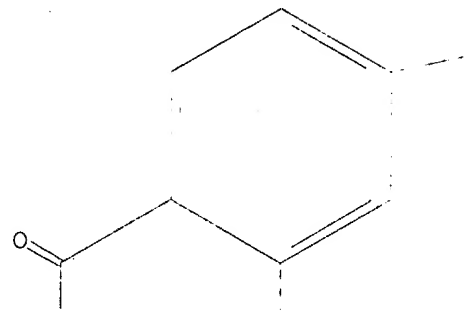
Me-O-SO_3^-

1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 128:271816

L40 ANSWER 39 OF 87 REGISTRY COPYRIGHT 2003 ACS
RN **173256-08-1** REGISTRY
CN Cuprate(3-), [2-[[[[5-[[2-(cyanoamino)ethyl]sulfonyl]-2-hydroxy-3-sulfophenyl]azo]phenylmethyl]azo]-4-sulfobenzoato(5-)]-, trihydrogen (9CI) (CA INDEX NAME)
MF C23 H15 Cu N6 O11 S3 . 3 H
CI CCS
SR CA
LC STN Files: CA, CAPLUS

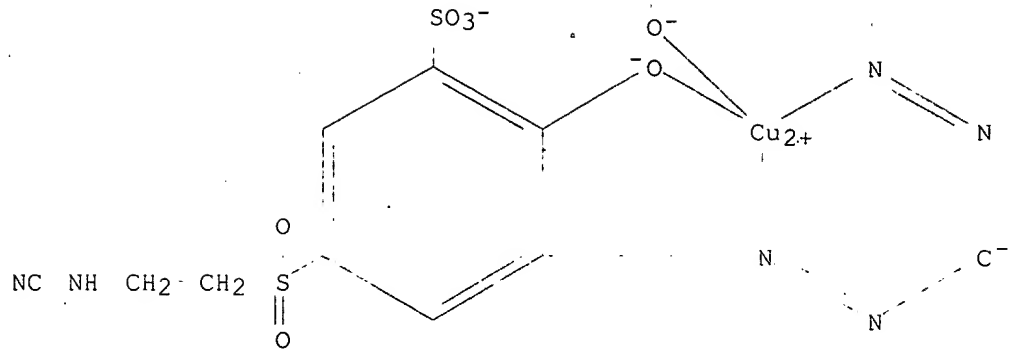
PAGE 1-A



PAGE 1-B

$-SO_3^-$

PAGE 2-A



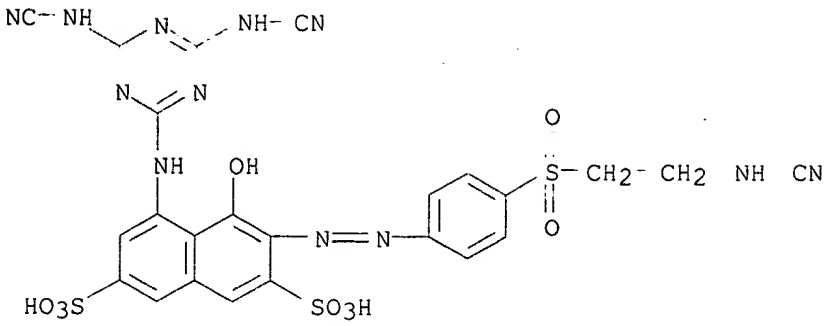
● 3 H^+

PAGE 2-B

1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 124:120109

L40 ANSWER 42 OF 87 REGISTRY COPYRIGHT 2003 ACS
RN **173063-35-9** REGISTRY
CN 2,7-Naphthalenedisulfonic acid, 5-[[4,6-bis(cyanoamino)-1,3,5-triazin-2-yl]amino]-3-[[4-[[2-(cyanoamino)ethyl]sulfonyl]phenyl]azo]-4-hydroxy-(9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C24 H18 N12 O9 S3
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

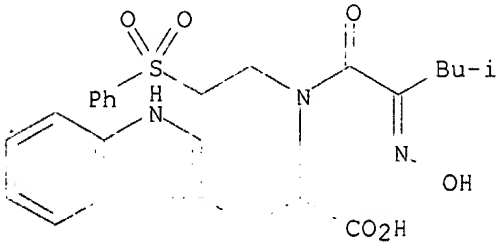


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 124:120110

L40 ANSWER 46 OF 87 REGISTRY COPYRIGHT 2003 ACS
RN **168766-92-5** REGISTRY
CN Tryptophan, N-[2-(hydroxyimino)-4-methyl-1-oxopentyl]-N-[2-(phenylsulfonyl)ethyl]- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN DL-Tryptophan, N-[2-(hydroxyimino)-4-methyl-1-oxopentyl]-N-[2-(phenylsulfonyl)ethyl]-
MF C25 H29 N3 O6 S
SR CA
LC STN Files: CA, CAPLUS

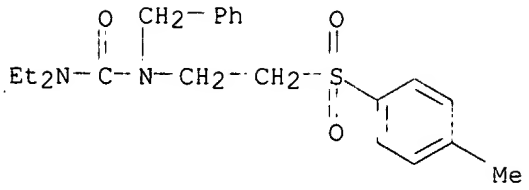


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 123:256434

L40 ANSWER 51 OF 87 REGISTRY COPYRIGHT 2003 ACS
RN **158612-51-2** REGISTRY
CN Urea, N,N-diethyl-N'-[2-[(4-methylphenyl)sulfonyl]ethyl]-N'-(phenylmethyl)- (9CI) (CA INDEX NAME)
MF C21 H28 N2 O3 S
SR CA
LC STN Files: CA, CAPLUS



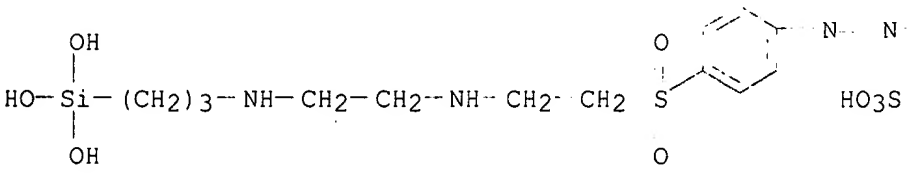
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

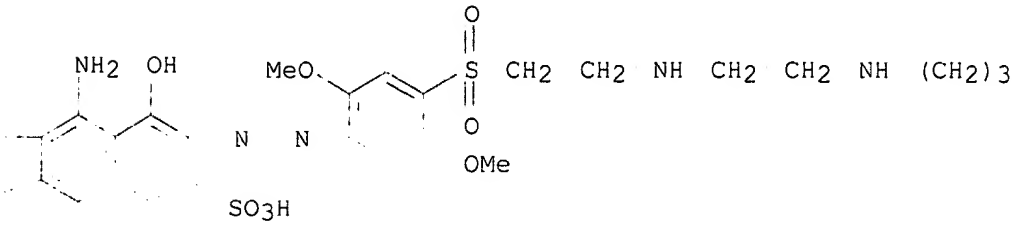
REFERENCE 1: 121:255452

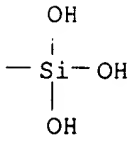
L40 ANSWER 52 OF 87 REGISTRY COPYRIGHT 2003 ACS
RN **155687-25-5** REGISTRY
CN 2,7-Naphthalenedisulfonic acid, 4-amino-6-[[2,5-dimethoxy-4-[[2-[[2-[[3-(trihydroxysilyl)propyl]amino]ethyl]amino]ethyl]sulfonyl]phenyl]azo]-5-hydroxy-3-[[4-[[2-[[2-[[3-(trihydroxysilyl)propyl]amino]ethyl]amino]ethyl]sulfonyl]phenyl]azo]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C38 H57 N9 O19 S4 Si2
SR CA
LC STN Files: CA, CAPLUS

PAGE 1-A



PAGE 1-B





PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

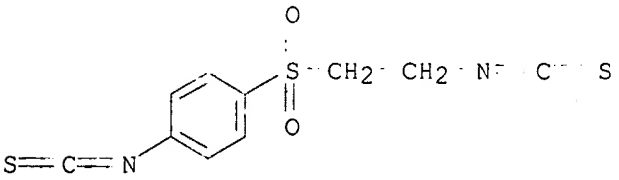
1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 121:85703

L40 ANSWER 53 OF 87 REGISTRY COPYRIGHT 2003 ACS
RN **152993-40-3** REGISTRY
CN Ethanol, 2-mercapto-, polymer with 1-isothiocyanato-4-[(2-isothiocyanatoethyl)sulfonyl]benzene (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Benzene, 1-isothiocyanato-4-[(2-isothiocyanatoethyl)sulfonyl]-, polymer with 2-mercaptoethanol (9CI)
MF (C10 H8 N2 O2 S3 . C2 H6 O S)x
CI PMS
PCT Polyother, Polyother only
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

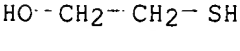
CM 1

CRN 1021-56-3
CMF C10 H8 N2 O2 S3



CM 2

CRN 60-24-2
CMF C2 H6 O S



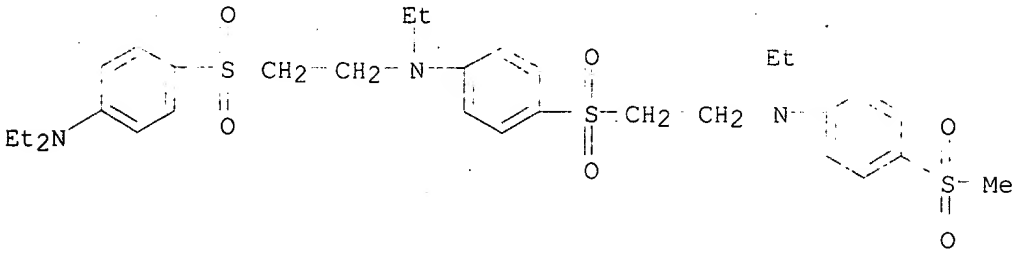
3 REFERENCES IN FILE CA (1957 TO DATE)
3 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 125:12775

REFERENCE 2: 121:257086

REFERENCE 3: 120:108740

L40 ANSWER 54 OF 87 REGISTRY COPYRIGHT 2003 ACS
RN **150221-19-5** REGISTRY
CN Benzenamine, N-[2-[[4-(diethylamino)phenyl]sulfonyl]ethyl]-N-ethyl-4-[[2-[ethyl[4-(methylsulfonyl)phenyl]amino]ethyl]sulfonyl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C31 H43 N3 O6 S3
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER

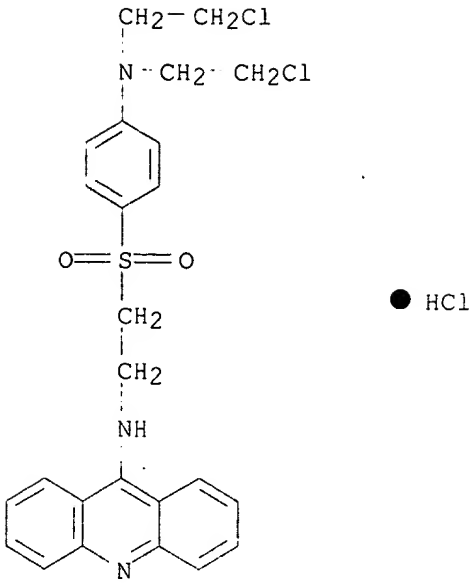


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 119:159790

L40 ANSWER 56 OF 87 REGISTRY COPYRIGHT 2003 ACS
RN **130199-16-5** REGISTRY
CN 9-Acridinamine, N-[2-[[4-[bis(2-chloroethyl)amino]phenyl]sulfonyl]ethyl]-, monohydrochloride (9CI) (CA INDEX NAME)
MF C25 H25 Cl2 N3 O2 S . Cl H
SR CA
LC STN Files: BEILSTEIN*, CA, CAPLUS, TOXCENTER
(*File contains numerically searchable property data)
CRN (130198-68-4)

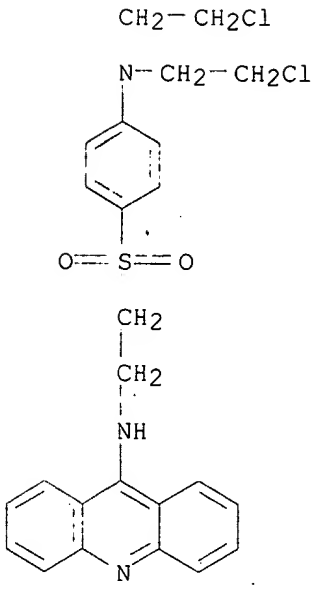


● HCl

1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 113:231187

L40 ANSWER 58 OF 87 REGISTRY COPYRIGHT 2003 ACS
RN **130198-68-4** REGISTRY
CN 9-Acridinamine, N-[2-[[4-[bis(2-chloroethyl)amino]phenyl]sulfonyl]ethyl]-(9CI) (CA INDEX NAME)
MF C25 H25 Cl2 N3 O2 S
CI COM
SR CA
LC STN Files: BEILSTEIN*, CA, CAPLUS, CASREACT, TOXCENTER
(*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

4 REFERENCES IN FILE CA (1957 TO DATE)
4 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 130:231875

REFERENCE 2: 125:75323

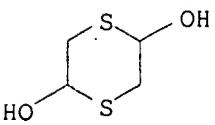
REFERENCE 3: 118:204683

REFERENCE 4: 113:231187

L40 ANSWER 59 OF 87 REGISTRY COPYRIGHT 2003 ACS
RN **128603-98-5** REGISTRY
CN 1,4-Dithiane-2,5-diol, polymer with 1-isothiocyanato-4-[(2-isothiocyanatoethyl)sulfonyl]benzene (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Benzene, 1-isothiocyanato-4-[(2-isothiocyanatoethyl)sulfonyl]-, polymer with 1,4-dithiane-2,5-diol (9CI)
MF (C10 H8 N2 O2 S3 . C4 H8 O2 S2)x
CI PMS
PCT Polyother, Polyother only
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

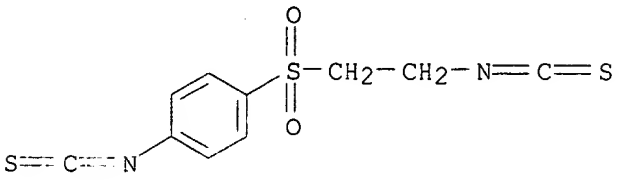
CM 1

CRN 40018-26-6
CMF C4 H8 O2 S2



CM 2

CRN 1021-56-3
CMF C10 H8 N2 O2 S3



2 REFERENCES IN FILE CA (1957 TO DATE)
2 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 133:127459

REFERENCE 2: 113:79779

L40 ANSWER 60 OF 87 REGISTRY COPYRIGHT 2003 ACS
RN **125679-24-5** REGISTRY
CN Cuprate(4-), [4-hydroxy-3-[[2-hydroxy-4-[[2-[methyl(2-sulfoethyl)amino]ethyl]sulfonyl]phenyl]azo]-5-[[[[3-[[2-[methyl(2-sulfoethyl)amino]ethyl]sulfonyl]phenyl]amino]carbonyl]amino]-2,7-naphthalenedisulfonato(6-)]-, tetrahydrogen (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 2,7-Naphthalenedisulfonic acid, 4-hydroxy-3-[[2-hydroxy-4-[[2-[methyl(2-sulfoethyl)amino]ethyl]sulfonyl]phenyl]azo]-5-[[[[3-[[2-[methyl(2-sulfoethyl)amino]ethyl]sulfonyl]phenyl]amino]carbonyl]amino]-, copper complex
MF C33 H34 Cu N6 O19 S6 . 4 H
CI CCS
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

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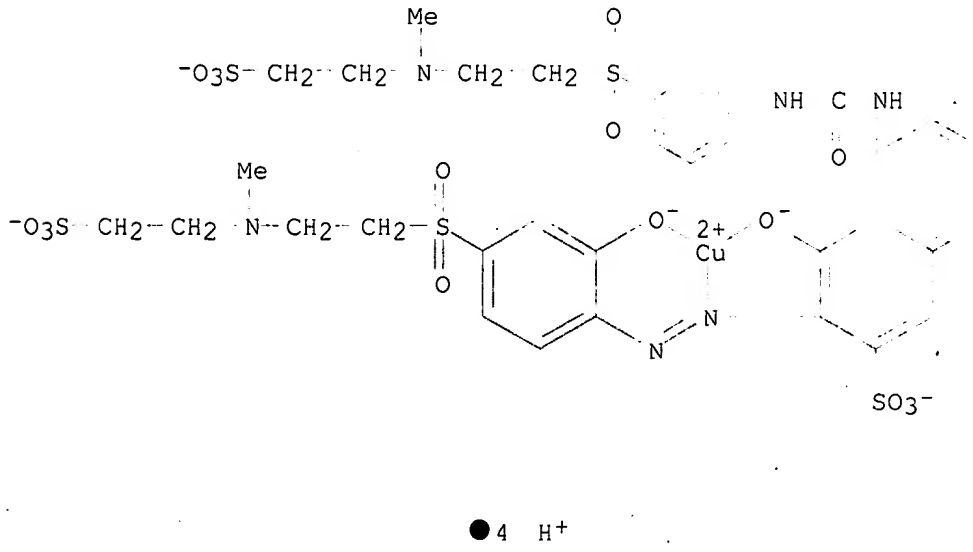


– SO_3^-

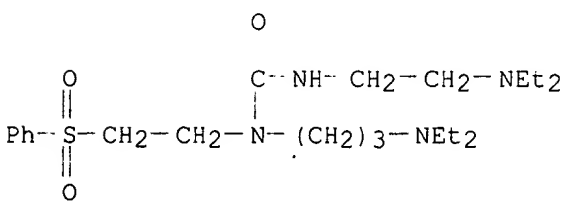
1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 112:120601

L40 ANSWER 61 OF 87 REGISTRY COPYRIGHT 2003 ACS
RN **125651-31-2** REGISTRY
CN Urea, N'-[2-(diethylamino)ethyl]-N-[3-(diethylamino)propyl]-N-[2-(phenylsulfonyl)ethyl]-, 2-hydroxy-1,2,3-propanetricarboxylate (1:2) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN AHR 12234
MF C22 H40 N4 O3 S . 2 C6 H8 O7
SR CA
LC STN Files: BIOSIS, CA, CAPLUS, EMBASE, MEDLINE, TOXCENTER

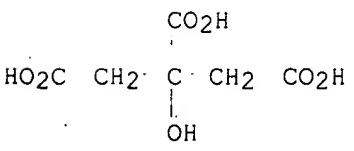
CM 1

CRN 121100-28-5
CMF C22 H40 N4 O3 S



CM 2

CRN 77-92-9
CMF C6 H8 O7



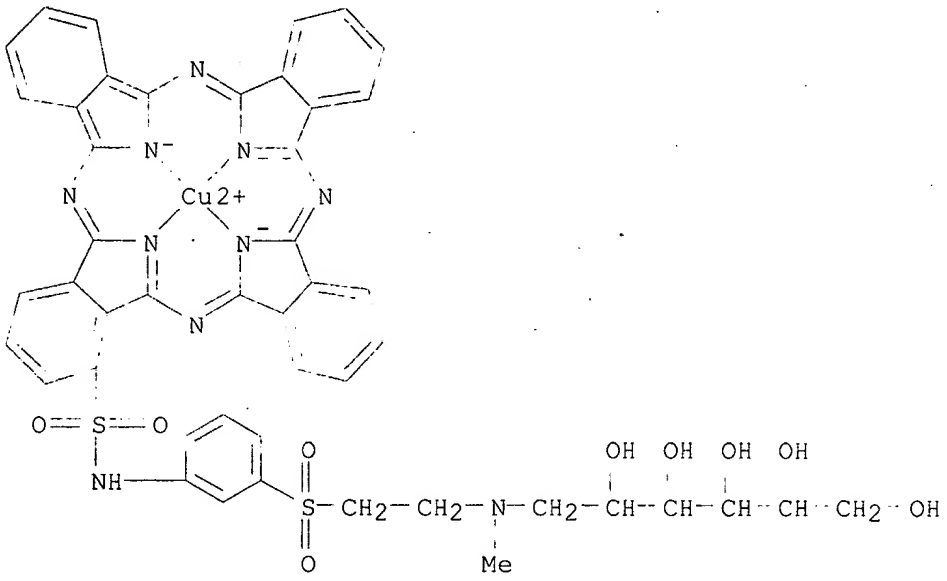
2 REFERENCES IN FILE CA (1957 TO DATE)
2 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 120:144163

REFERENCE 2: 112:111740

L40 ANSWER 62 OF 87 REGISTRY COPYRIGHT 2003 ACS
RN **109040-88-2** REGISTRY
CN Copper, [hydrogen 3'[[m-[N-methyl-N-(gluco-2,3,4,5,6-pentahydroxyhexyl)tauryl]phenyl]sulfamoyl]phthalocyaninesulfonato(2-)]-, potassium salt (7CI) (CA INDEX NAME)
MF C47 H39 Cu N10 O12 S3 . K
CI CCS, IDS
SR CAOLD
LC STN Files: CA, CAOLD, CAPLUS

PAGE 1-A



PAGE 2-A

D1— SO_3^-

● K^+

1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 60:10158

L40 ANSWER 63 OF 87 REGISTRY COPYRIGHT 2003 ACS
RN **105038-63-9** REGISTRY
CN Cuprate(7-), [1-(2,5-dichloro-4-sulfophenyl)-4,5-dihydro-5-oxo-4-[[5-[[2-[[2-methoxy-4-[[(8,15,22-trisulfo-29H,31H-phthalocyanin-1-yl-.kappa.N29,.kappa.N30,.kappa.N31,.kappa.N32)sulfonyl]amino]phenyl]sulfonyl]ethyl]amino]-2-sulfophenyl]azo]-1H-pyrazole-3-carboxylato(8-)]-, hexahydrogen, (SP-4-2)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 1H-Pyrazole-3-carboxylic acid, 1-(2,5-dichloro-4-sulfophenyl)-4,5-dihydro-5-oxo-4-[[5-[[2-[[2-methoxy-4-[[(8,15,22-trisulfo-29H,31H-phthalocyanin-1-

yl)sulfonyl]amino]phenyl]sulfonyl]ethyl]amino]-2-sulfophenyl]azo]-, copper complex

CN Cuprate(7-), [1-(2,5-dichloro-4-sulfophenyl)-4,5-dihydro-5-oxo-4-[[5-[[2-[[2-methoxy-4-[[(8,15,22-trisulfo-29H,31H-phthalocyanin-1-yl)sulfonyl]amino]phenyl]sulfonyl]ethyl]amino]-2-sulfophenyl]azo]-1H-pyrazole-3-carboxylato(8-)-N29,N30,N31,N32]-, hexahydrogen, (SP-4-2)-

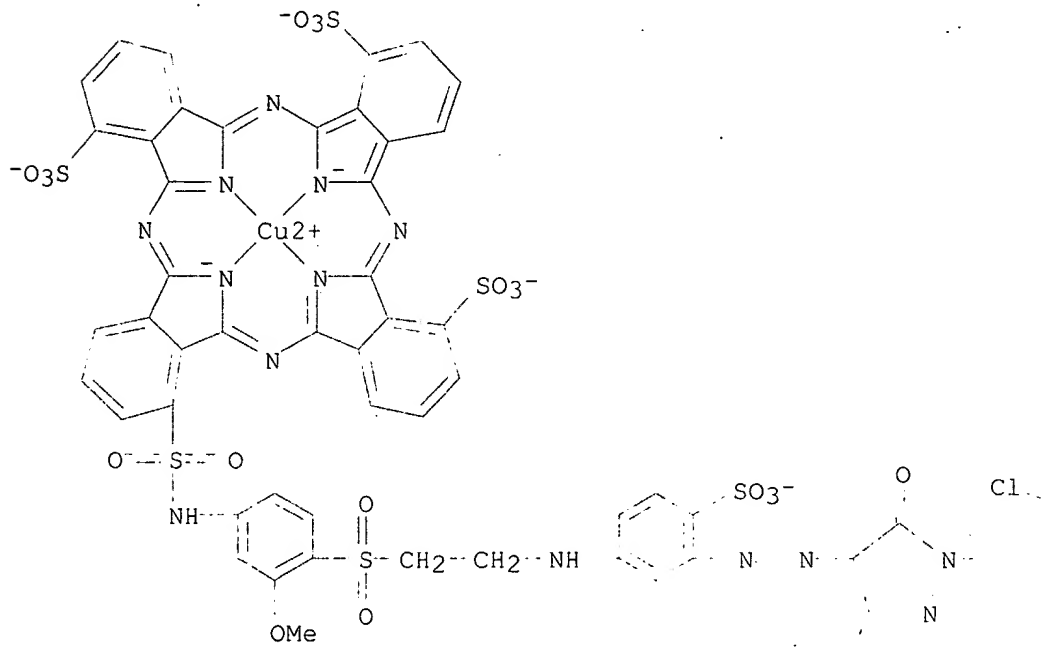
MF C57 H30 Cl2 Cu N14 O23 S7 . 6 H

CI CCS

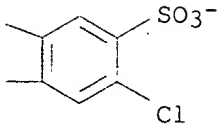
SR CA

LC STN Files: CA, CAPLUS, USPATFULL

PAGE 1-A



PAGE 1-B



PAGE 2-A

● 6 H^+

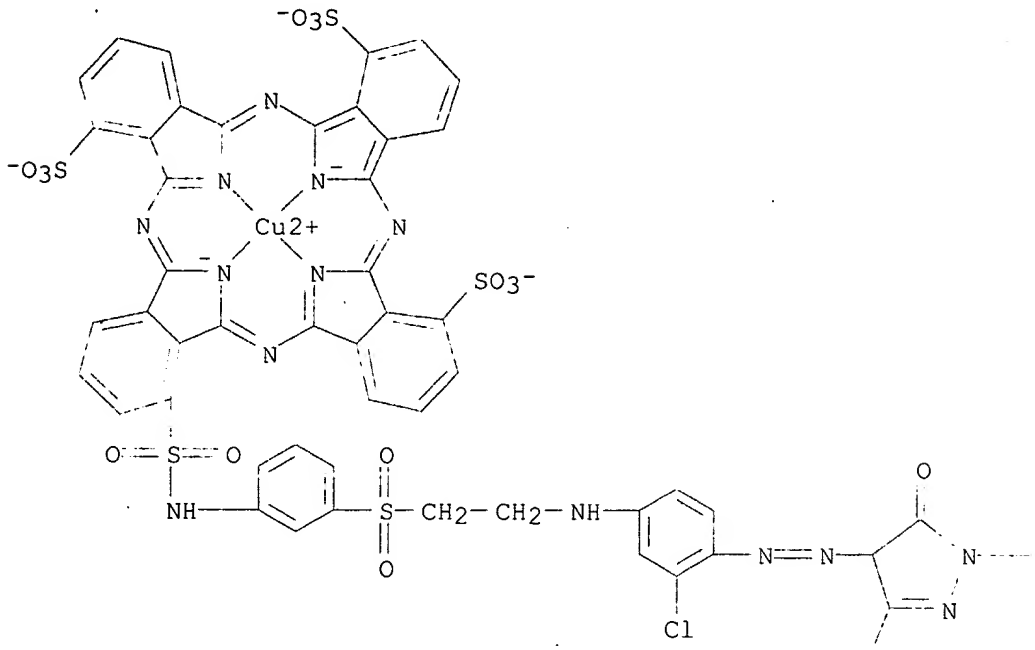
2 REFERENCES IN FILE CA (1957 TO DATE)
2 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 130:238784

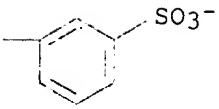
REFERENCE 2: 105:192866

L40 ANSWER 65 OF 87 REGISTRY COPYRIGHT 2003 ACS
RN **105015-18-7** REGISTRY
CN Cuprate(5-), [4-[[2-chloro-4-[[2-[[3-[[(8,15,22-trisulfo-29H,31H-phthalocyanin-1-yl)sulfonyl]amino]phenyl]sulfonyl]ethyl]amino]phenyl]azo]-4,5-dihydro-5-oxo-1-(3-sulfophenyl)-1H-pyrazole-3-carboxylato(7-)-N29,N30,N31,N32]-, pentahydrogen, (SP-4-2)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 1H-Pyrazole-3-carboxylic acid, 4-[[2-chloro-4-[[2-[[3-[[(8,15,22-trisulfo-29H,31H-phthalocyanin-1-yl)sulfonyl]amino]phenyl]sulfonyl]ethyl]amino]phenyl]azo]-4,5-dihydro-5-oxo-1-(3-sulfophenyl)-, copper complex
MF C56 H30 Cl Cu N14 O19 S6 . 5 H
CI CCS
SR CA
LC STN Files: CA, CAPLUS

PAGE 1-A



PAGE 1-B



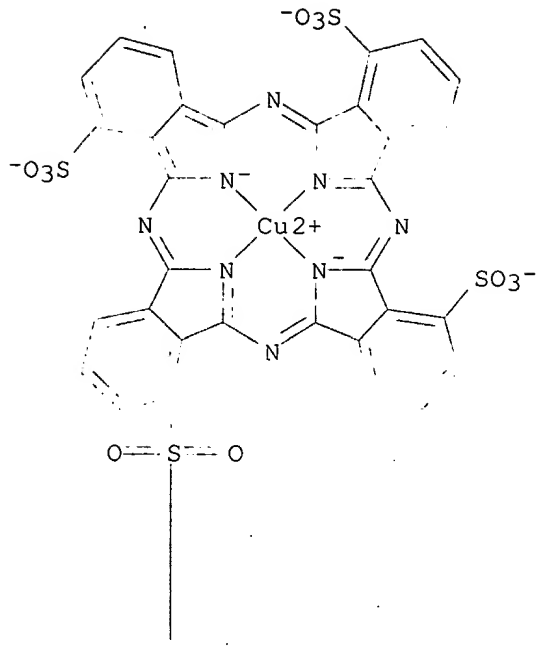
PAGE 2-A

1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

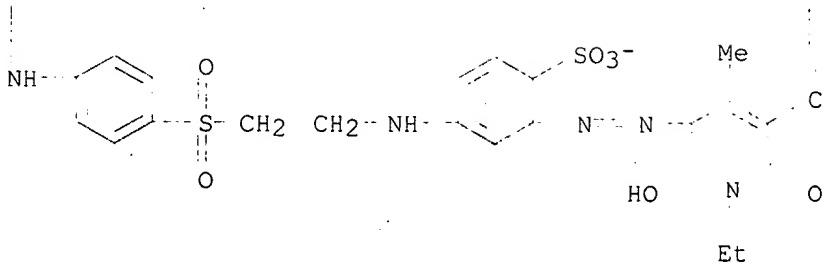
REFERENCE 1: 105:192866

L40 ANSWER 67 OF 87 REGISTRY COPYRIGHT 2003 ACS
RN **104994-17-4** REGISTRY
CN Cuprate(4-), [22-[[[4-[[2-[[3-[[5-(aminocarbonyl)-1-ethyl-1,6-dihydro-2-hydroxy-4-methyl-6-oxo-3-pyridinyl]azo]-4-sulfophenyl]amino]ethyl]sulfonyl]phenyl]amino]sulfonyl]-29H,31H-phthalocyanine-1,8,15-trisulfonato(6-)-.kappa.N29,.kappa.N30,.kappa.N31,.kappa.N32]-, tetrahydrogen, (SP-4-2)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 29H,31H-Phthalocyanine-1,8,15-trisulfonic acid, 22-[[[4-[[2-[[3-[[5-(aminocarbonyl)-1-ethyl-1,6-dihydro-2-hydroxy-4-methyl-6-oxo-3-pyridinyl]azo]-4-sulfophenyl]amino]ethyl]sulfonyl]phenyl]amino]sulfonyl]-, copper complex
CN Cuprate(4-), [22-[[[4-[[2-[[3-[[5-(aminocarbonyl)-1-ethyl-1,6-dihydro-2-hydroxy-4-methyl-6-oxo-3-pyridinyl]azo]-4-sulfophenyl]amino]ethyl]sulfonyl]phenyl]amino]sulfonyl]-29H,31H-phthalocyanine-1,8,15-trisulfonato(6-)-N29,N30,N31,N32]-, tetrahydrogen, (SP-4-2)-
MF C55 H36 Cu N14 O19 S6 . 4 H
CI CCS
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

PAGE 1-A



PAGE 2-A



● 4 H^+

PAGE 2-B

— NH_2

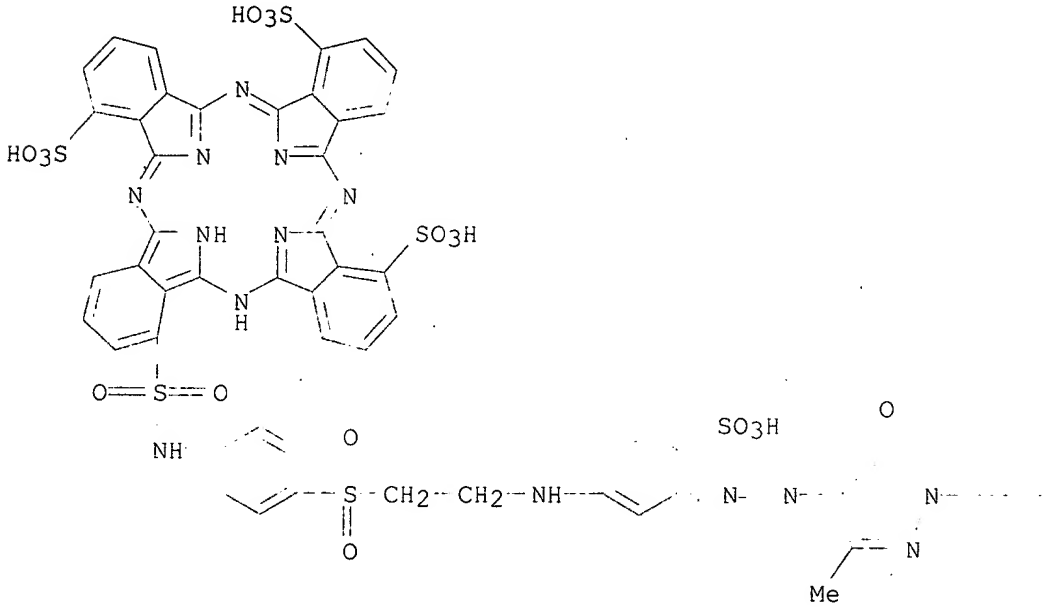
2 REFERENCES IN FILE CA (1957 TO DATE)
2 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 130:238784

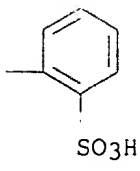
REFERENCE 2: 105:192866

L40 ANSWER 70 OF 87 REGISTRY COPYRIGHT 2003 ACS
RN **104359-64-0** REGISTRY
CN 29H,31H-Phthalocyanine-1,8,15-trisulfonic acid, 22-[[[4-[[2-[[3-[[4,5-dihydro-3-methyl-5-oxo-1-(2-sulfophenyl)-1H-pyrazol-4-yl]azo]-4-sulfophenyl]amino]ethyl]sulfonyl]phenyl]amino]sulfonyl]- (9CI) (CA INDEX NAME)
MF C56 H40 N14 O20 S7
SR CA
LC STN Files: CA, CAPLUS

PAGE 1-A



PAGE 1-B

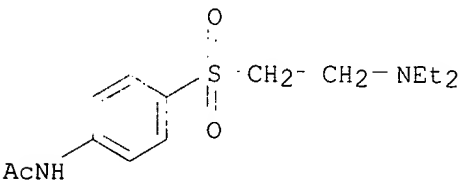


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 105:192866

L40 ANSWER 71 OF 87 REGISTRY COPYRIGHT 2003 ACS
RN **100862-20-2** REGISTRY
CN Acetanilide, 4'-(2-diethylaminoethylsulfonyl)- (6CI) (CA INDEX NAME)
FS 3D CONCORD
MF C14 H22 N2 O3 S
SR CAOLD
LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS
(*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3 REFERENCES IN FILE CA (1957 TO DATE)
3 REFERENCES IN FILE CAPLUS (1957 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 55:64883

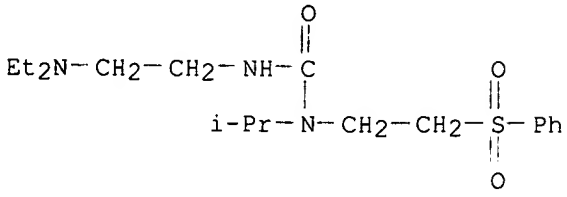
REFERENCE 2: 46:48438

REFERENCE 3: 44:38020

L40 ANSWER 72 OF 87 REGISTRY COPYRIGHT 2003 ACS
RN **96436-73-6** REGISTRY
CN Urea, N'-[2-(diethylamino)ethyl]-N-(1-methylethyl)-N-[2-(phenylsulfonyl)ethyl]-, (2Z)-2-butenedioate (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Urea, N'-[2-(diethylamino)ethyl]-N-(1-methylethyl)-N-[2-(phenylsulfonyl)ethyl]-, (Z)-2-butenedioate
OTHER NAMES:
CN AHR 10718
FS STEREOSEARCH
MF C18 H31 N3 O3 S . x C4 H4 O4
LC STN Files: BIOSIS, CA, CAPLUS, MEDLINE, TOXCENTER

CM 1

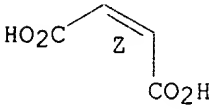
CRN 85053-46-9
CMF C18 H31 N3 O3 S



CM 2

CRN 110-16-7
CMF C4 H4 O4

Double bond geometry as shown.



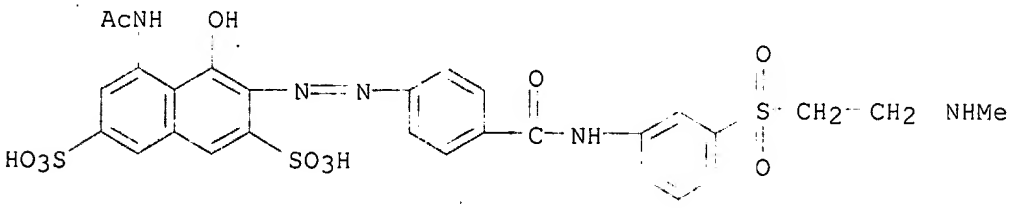
3 REFERENCES IN FILE CA (1957 TO DATE)
3 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 108:215872

REFERENCE 2: 108:198036

REFERENCE 3: 102:214833

L40 ANSWER 73 OF 87 REGISTRY COPYRIGHT 2003 ACS
RN **88640-57-7** REGISTRY
CN 2,7-Naphthalenedisulfonic acid, 5-(acetylamino)-4-hydroxy-3-[[4-[[[3-[[2-(methylamino)ethyl]sulfonyl]phenyl]amino]carbonyl]phenyl]azo]-, disodium salt (9CI) (CA INDEX NAME)
MF C28 H27 N5 O11 S3 . 2 Na
LC STN Files: CA, CAPLUS



●2 Na

1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

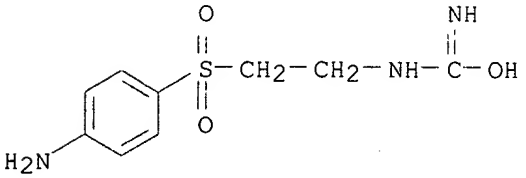
REFERENCE 1: 100:53022

L40 ANSWER 74 OF 87 REGISTRY COPYRIGHT 2003 ACS
RN **80111-44-0** REGISTRY

CN Agarose, [2-[(4-aminophenyl)sulfonyl]ethyl]carbamimidate (9CI) (CA INDEX NAME)
MF C9 H13 N3 O3 S . x Unspecified
LC STN Files: CA, CAPLUS

CM 1

CRN 173046-53-2
CMF C9 H13 N3 O3 S



CM 2

CRN 9012-36-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
4 REFERENCES IN FILE CA (1957 TO DATE)
4 REFERENCES IN FILE CAPLUS (1957 TO DATE)

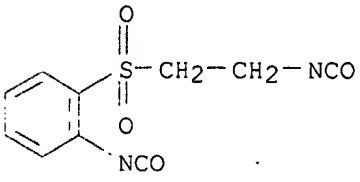
REFERENCE 1: 103:2611

REFERENCE 2: 102:181389

REFERENCE 3: 101:19748

REFERENCE 4: 96:2922

L40 ANSWER 75 OF 87 REGISTRY COPYRIGHT 2003 ACS
RN **76806-18-3** REGISTRY
CN Benzene, 1-isocyanato-2-[(2-isocyanatoethyl)sulfonyl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C10 H8 N2 O4 S
LC STN Files: CA, CAPLUS, USPATFULL

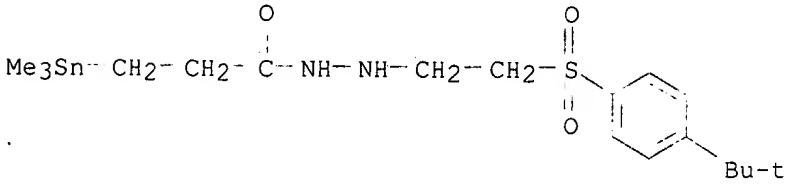


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 94:104676

L40 ANSWER 76 OF 87 REGISTRY COPYRIGHT 2003 ACS
RN **72959-14-9** REGISTRY
CN Propanoic acid, 3-(trimethylstannyl)-, 2-[2-[[4-(1,1-dimethylethyl)phenyl]sulfonyl]ethyl]hydrazide (9CI) (CA INDEX NAME)
MF C18 H32 N2 O3 S Sn
LC STN Files: BEILSTEIN*, CA, CAPLUS, USPATFULL
(*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

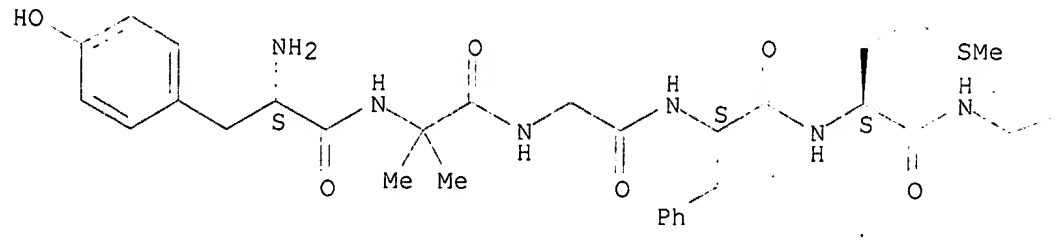
REFERENCE 1: 92:111156

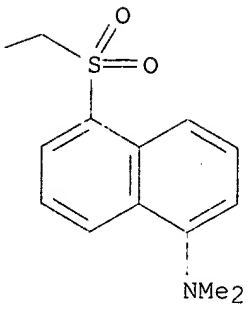
L40 ANSWER 77 OF 87 REGISTRY COPYRIGHT 2003 ACS
RN **72564-55-7** REGISTRY
CN L-Methioninamide, L-tyrosyl-2-methylalanylglycyl-L-phenylalanyl-N-[2-[[5-(dimethylamino)-1-naphthalenyl]sulfonyl]ethyl]- (9CI) (CA INDEX NAME)
FS PROTEIN SEQUENCE; STEREOSEARCH
MF C43 H55 N7 O8 S2
LC STN Files: CA, CAPLUS

RELATED SEQUENCES AVAILABLE WITH SEQLINK

Absolute stereochemistry.

PAGE 1-A

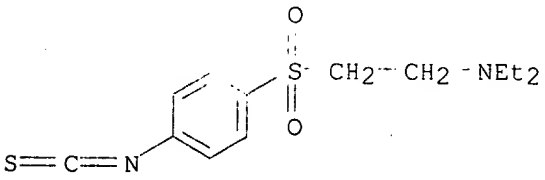




1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 92:52415

L40 ANSWER 78 OF 87 REGISTRY COPYRIGHT 2003 ACS
RN **40330-87-8** REGISTRY
CN Ethanamine, N,N-diethyl-2-[(4-isothiocyanatophenyl)sulfonyl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C13 H18 N2 O2 S2
LC STN Files: BEILSTEIN*, CA, CAPLUS, TOXCENTER
(*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3 REFERENCES IN FILE CA (1957 TO DATE)
3 REFERENCES IN FILE CAPLUS (1957 TO DATE)

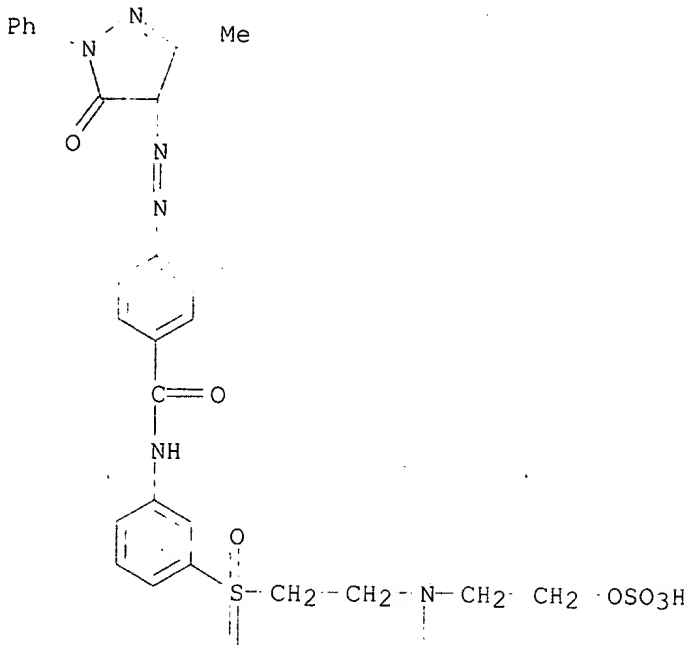
REFERENCE 1: 94:76568

REFERENCE 2: 81:37388

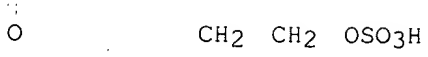
REFERENCE 3: 78:83960

L40 ANSWER 79 OF 87 REGISTRY COPYRIGHT 2003 ACS
RN **40082-82-4** REGISTRY
CN Benzamide, N-[3-[[2-[bis[2-(sulfooxy)ethyl]amino]ethyl]sulfonyl]phenyl]-4-[(4,5-dihydro-3-methyl-5-oxo-1-phenyl-1H-pyrazol-4-yl)azo]-, disodium salt (9CI) (CA INDEX NAME)
MF C29 H32 N6 O12 S3 . 2 Na
LC STN Files: CA, CAPLUS

PAGE 1-A



PAGE 2-A

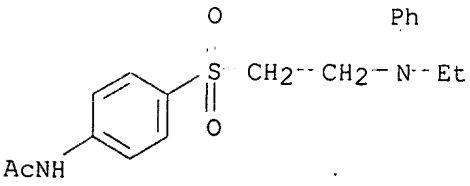


●2 Na

1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 78:5402

L40 ANSWER 81 OF 87 REGISTRY COPYRIGHT 2003 ACS
RN **37710-59-1** REGISTRY
CN Acetamide, N-[4-[[2-(ethylphenylamino)ethyl]sulfonyl]phenyl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C18 H22 N2 O3 S
LC STN Files: CA, CAPLUS

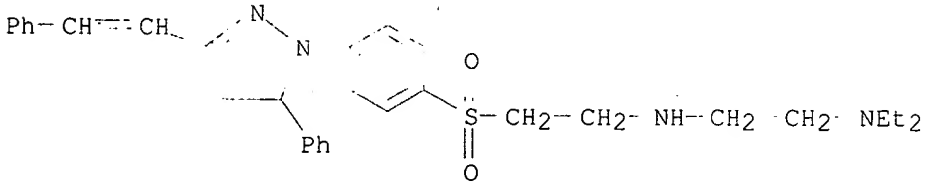


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 78:85938

L40 ANSWER 82 OF 87 REGISTRY COPYRIGHT 2003 ACS
RN **29244-86-8** REGISTRY
CN 1,2-Ethanediamine, N'-[2-[[4-[4,5-dihydro-5-phenyl-3-(2-phenylethenyl)-1H-pyrazol-1-yl]phenyl]sulfonyl]ethyl]-N,N-diethyl- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 2-Pyrazoline, 1-[p-[N-[2-(diethylamino)ethyl]tauryl]phenyl]-5-phenyl-3-styryl- (8CI)
FS 3D CONCORD
MF C31 H38 N4 O2 S
LC STN Files: BEILSTEIN*, CA, CAPLUS, IFICDB, IFIPAT, IFIUDB
(*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3 REFERENCES IN FILE CA (1957 TO DATE)
3 REFERENCES IN FILE CAPLUS (1957 TO DATE)

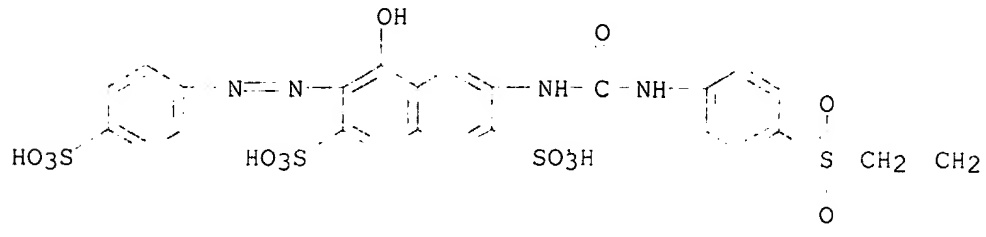
REFERENCE 1: 77:21588

REFERENCE 2: 74:100614

REFERENCE 3: 73:78560

L40 ANSWER 83 OF 87 REGISTRY COPYRIGHT 2003 ACS
RN **24273-68-5** REGISTRY
CN 2,7-Naphthalenedisulfonic acid, 6-[3-[p-(N,N-diethyltauryl)phenyl]ureido]-4-hydroxy-3-[(p-sulfophenyl)azo]- (8CI) (CA INDEX NAME)
FS 3D CONCORD
MF C29 H31 N5 O13 S4
LC STN Files: CA, CAPLUS, IFICDB, IFIPAT, IFIUDB

PAGE 1-A



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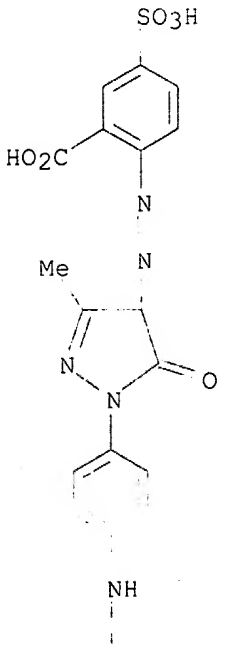
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

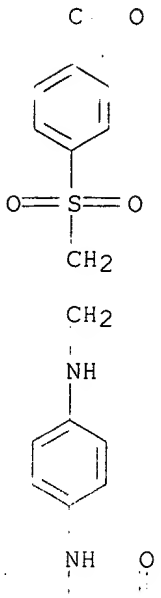
1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 71:125974

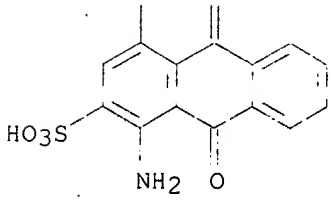
L40 ANSWER 84 OF 87 REGISTRY COPYRIGHT 2003 ACS
RN **7291-83-0** REGISTRY
CN Benzoic acid, 2-[[1-[4-[[4-[[2-[[4-[(4-amino-9,10-dihydro-9,10-dioxo-3-sulfo-1-anthracenyl)amino]phenyl]amino]ethyl]sulfonyl]benzoyl]amino]phenyl]-4,5-dihydro-3-methyl-5-oxo-1H-pyrazol-4-yl]azo]-5-sulfo- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Benzoic acid, 2-[[1-[p-[p-[[2-[p-[(4-amino-3-sulfo-1-anthraquinonyl)amino]anilino]ethyl]sulfonyl]benzamido]phenyl]-5-hydroxy-3-methylpyrazol-4-yl]azo]-5-sulfo- (8CI)
FS 3D CONCORD
MF C46 H36 N8 O14 S3
LC STN Files: CA, CAOLD, CAPLUS



PAGE 2-A



PAGE 3-A

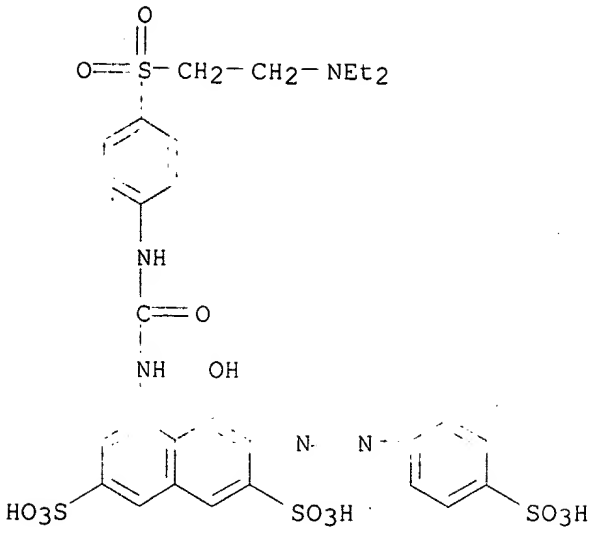


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 65:65338

L40 ANSWER 85 OF 87 REGISTRY COPYRIGHT 2003 ACS
RN **6730-50-3** REGISTRY
CN 2,7-Naphthalenedisulfonic acid, 5-[3-[p-[[2-(diethylamino)ethyl]sulfonyl]phenyl]ureido]-4-hydroxy-3-[(p-sulfophenyl)azo]- (7CI, 8CI) (CA INDEX NAME)
FS 3D CONCORD
MF C29 H31 N5 O13 S4
LC STN Files: CA, CAOLD, CAPLUS

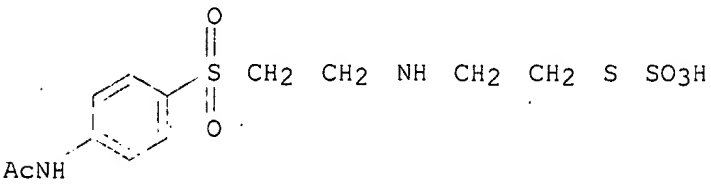


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 65:29899

L40 ANSWER 86 OF 87 REGISTRY COPYRIGHT 2003 ACS
RN **5755-88-4** REGISTRY
CN Acetanilide, 4'-[[2-[(2-mercaptoethyl)amino]ethyl]sulfonyl]-, sulfate (ester) (8CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Acetanilide, 4'-[[2-[(2-mercaptoethyl)amino]ethyl]sulfonyl]-, hydrogen sulfate (7CI)
FS 3D CONCORD
MF C12 H18 N2 O6 S3
LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS
(*File contains numerically searchable property data)



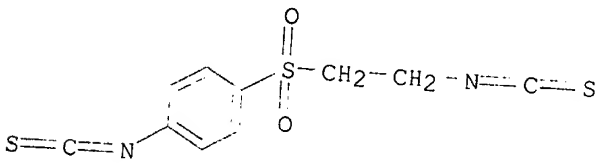
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 64:67255

L40 ANSWER 87 OF 87 REGISTRY COPYRIGHT 2003 ACS

RN 1021-56-3 REGISTRY
CN Benzene, 1-isothiocyanato-4-[(2-isothiocyanatoethyl)sulfonyl]- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Isothiocyanic acid, diester with 2-[(p-hydroxyphenyl)sulfonyl]ethanol (7CI)
OTHER NAMES:
CN p-[(2-Isothiocyanatoethyl)sulfonyl]phenyl isothiocyanate
FS 3D CONCORD
MF C10 H8 N2 O2 S3
CI COM
LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS, TOXCENTER
(*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

5 REFERENCES IN FILE CA (1957 TO DATE)
5 REFERENCES IN FILE CAPLUS (1957 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 94:76568

REFERENCE 2: 83:191975

REFERENCE 3: 81:37388

REFERENCE 4: 78:83960

REFERENCE 5: 62:29534